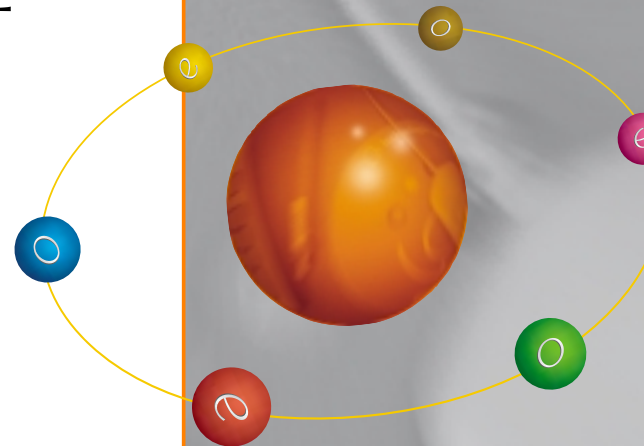


# Objecteering/UML

## Installing Objecteering/UML

Version 5.2.2



[www.objecteering.com](http://www.objecteering.com)

Taking object development one step further

*Objecteering*  
**Software**

Information in this document is subject to change without notice and does not represent a commitment on the part of Objectteering Software. The software described in this document is furnished under a license agreement. The software may be used or copied only in accordance with the terms of the agreement. It is against the law to copy the software on any medium except as specifically allowed in the license agreement. The purchaser may make one copy of the software for backup purposes. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or information storage and retrieval systems, for any purpose other than the purchaser's personal use, without the express written consent of Objectteering Software.

© 2002 Objectteering Software

Objectteering/UML version 5.2.2 - CODOBJ 001/001

Objectteering/UML is a registered trademark of Objectteering Software.

This product includes software developed by the Apache Software Foundation (<http://www.apache.org/>).

UML and OMG are registered trademarks of the Object Management Group. Rational ClearCase is a registered trademark of Rational Software. CM Synergy is a registered trademark of Telelogic. PVCS Version Manager is a registered trademark of Merant. Visual SourceSafe is a registered trademark of Microsoft. All other company or product names are trademarks or registered trademarks of their respective owners.

## Overview of Objectteering/UML installation procedures

---

### Delivery of Objectteering/UML

Objectteering/UML is delivered with the following elements:

- ◆ an Objectteering/UML installation CD-ROM. It contains all the necessary executables, the on-line help (HTML for UNIX and Windows) and examples. The "setup" executable is used to launch the installation.
- ◆ documentation on *Objectteering/UML Modeler* and on different modules.

Your site has a unique identification number, labelled "site number", which universally identifies each model element.

If you are using Objectteering/UML for the first time, we recommend that you try out our "*First Steps*" workshop (chapter 3 of this user guide).

### Different installation modes

- ◆ Installation over a previous version
- ◆ Single station configuration
- ◆ Server configuration
- ◆ Client configuration, for both lightweight clients and heavyweight clients

### Further information

Two files are available on the Objectteering/UML installation CD-ROM:

- ◆ "*readme.txt*": this file contains information which does not figure in the Objectteering/UML user guides, as well as information which must be read before beginning the installation procedure.
- ◆ "*release.txt*": this file contains corrections and evolutions in the different versions of Objectteering/UML.

After installation, these two files are available in your installation's "*help*" directory.

### **Objectteering/UML license file**

In order to install the Professional Edition or the Enterprise Edition of Objectteering/UML, you must have the appropriate license file. This file will have been provided by the Objectteering Software technical support team.

To contact the Objectteering/UML support team, send a mail to *support@objectteering.com*.

No license file is needed to install the Personal Edition of Objectteering/UML.

### **Flexlm tool**

The "*lmtools*" flexlm tool is delivered as standard with the Objectteering/UML CASE tool. This program groups together a set of tools used to manage license installation on the network.

### **Objectteering/UML version**

When installing Objectteering/UML in client/server mode, both the client and server posts must have the same version of Objectteering/UML installed.

---

## Installing in Windows

---

### Prerequisites

Objecteering/UML 5.2.2 can be installed in Windows 95, Windows 98, Windows 2000 or Windows NT.

Here are the product's general installation characteristics:

- ◆ disk resources: 200 to 350 Mo, depending on modules selected
- ◆ minimum RAM: 128 Mo, 256 recommended
- ◆ minimum processor power: PentiumII 500MHz
- ◆ CD-ROM drive
- ◆ administrator licenses (Windows NT)

### Re-installing

When a new version of Objecteering/UML is installed over a former installation, the previous version is overwritten, but modeling, profiling and document template projects are retained.

Where version 5.2.2 is installed over an earlier version, UML modeling, profiling and document template projects can be upgraded, by simply double-clicking on the relevant project file in the Windows explorer or selecting the project in question in the "*Open a UML modeling project*" or "*Open a UML profiling project*" windows. This automatically launches the migration procedure. For further details, please refer to the "*Receiving or upgrading UML modeling projects*" section in chapter 3 of the *Objecteering/UML Modeler* user guide.

---

## **Stand alone installation in Windows**

---

In a stand alone installation in Windows, UML modeling and profiling projects, and document template projects are accessed directly by Objectteering/UML without going through the site server. Only one user can connect to a given project at a time. Projects are called "*local*" and the server is always called "*LOCAL*".

## Installation procedure

Before launching the installation procedure, you must be in possession of a license file provided by the license administrator (requested from [license@objectteering.com](mailto:license@objectteering.com)) or from our web site ([www.objectteering.com](http://www.objectteering.com)).

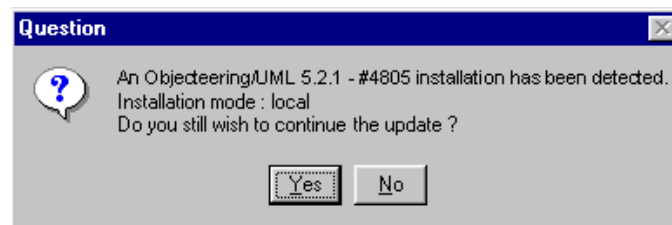
Note: The Personal Edition of Objectteering/UML comes with a built-in license file.

To install Objectteering/UML in the Windows environment, you must:

- 1 - Insert the Objectteering/UML CD-ROM.
- 2 - Select and click on "*setup.exe*".

The Objectteering/UML setup procedure is then automatically launched. Let yourself be guided by the questions asked during installation.

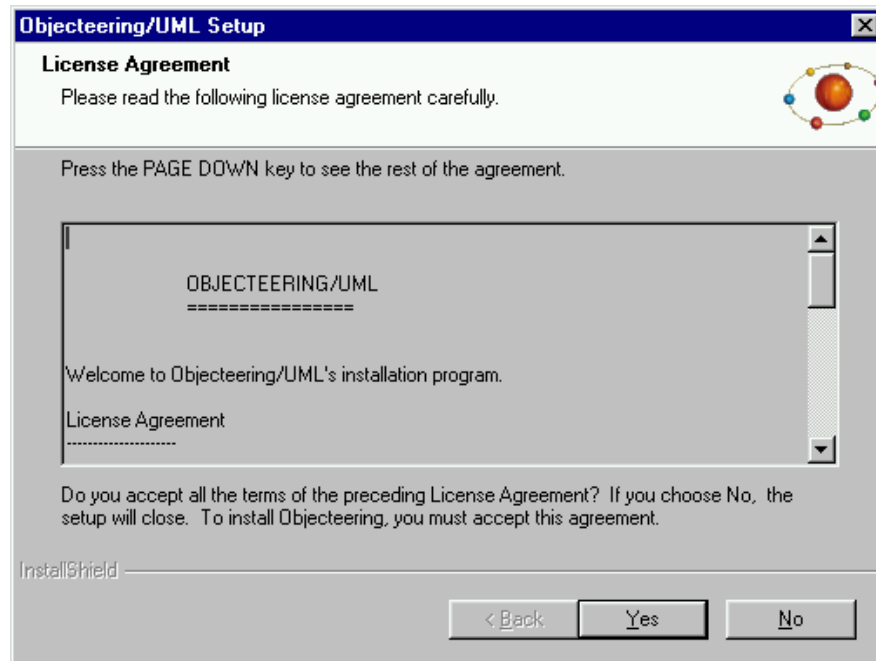
If an earlier version of Objectteering/UML has already been installed on your site, a dialog box of the following type will appear (Figure 2-1):



**Figure 2-1.** Question when installing Objectteering/UML over an earlier version of the tool

In this case, the installation procedure will run using the parameters set for the previous installation. If this is not the case, the installation path will be requested.

## The software license agreement



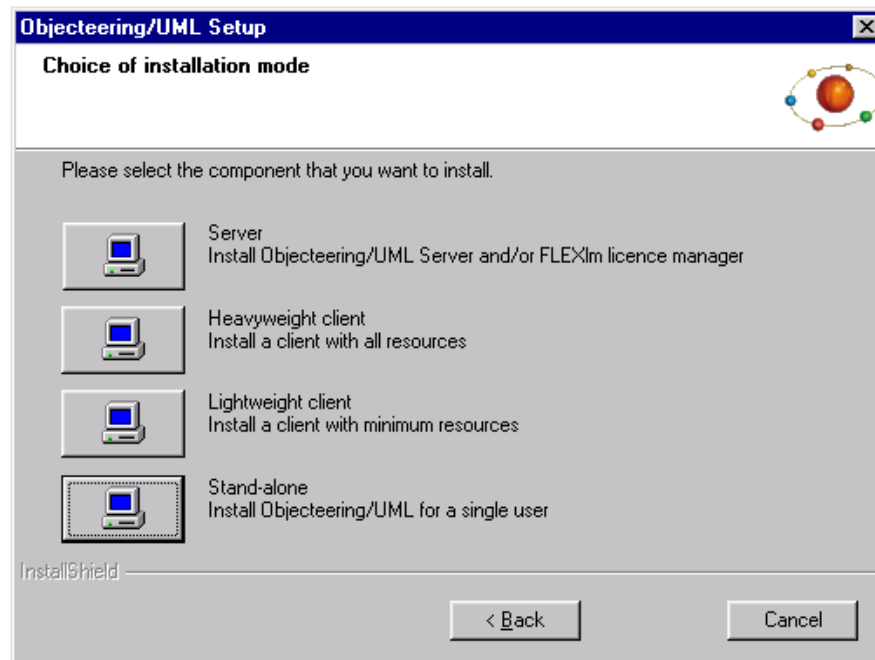
**Figure 2-2.** The software license agreement page

Read the information given on this software license agreement page, and then click on the "Yes" button.



## Selecting the installation mode

Select the mode in which you wish to install Objectteering/UML - "Server", "Heavyweight client", "Lightweight client" or "Stand-alone" (as shown in Figure 2-3).



**Figure 2-3.** Selecting the installation mode

Select the stand-alone mode, and click on the "Next" button.

If you are installing either the Professional Edition or the Enterprise Edition, a question concerning the license file then appears (as shown in Figure 2-4).



**Figure 2-4.** Question on licenses

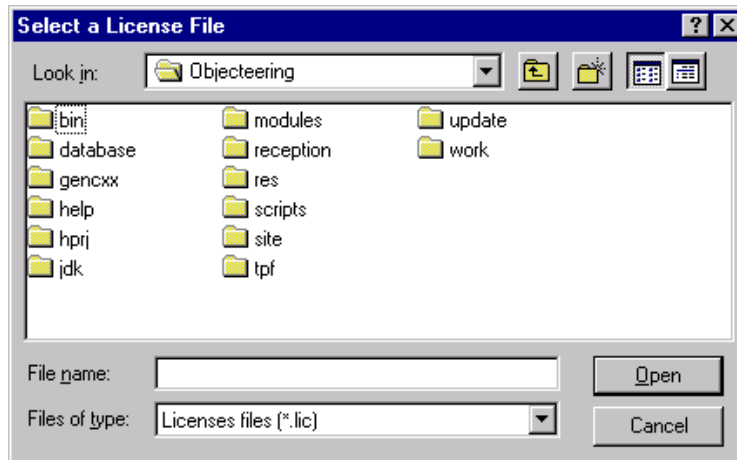
If you do not have a license file, click on the "No" button. The installation procedure will then be stopped.

If you have a license file, click on the "Yes" button. The installation procedure will then continue, and the screen shown in Figure 2-5 will be used to indicate the positioning of your license file.

Note: The Personal Edition of Objecteering/UML comes with a built-in license file, which means that the screen shown in Figure 2-4 will not appear when you are installing.

Note: This window only appears after selecting either the "Stand alone" or "Server" installation modes.

## Selecting your license file



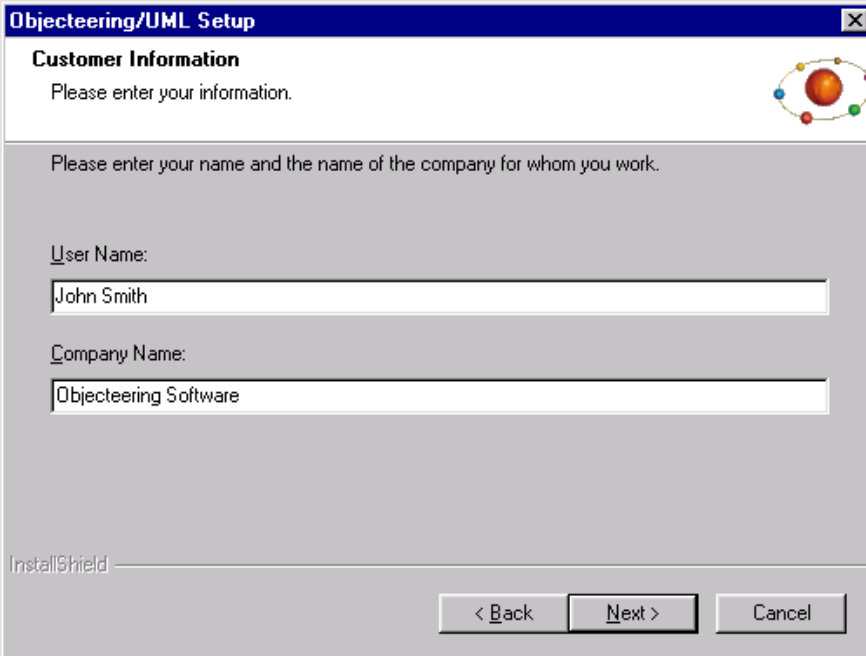
**Figure 2-5.** The license selection window

Browse in this explorer and select the license file sent to you by Objectteering Software.

Warning: Do not use shortcuts to browse!

## Entering user information

This screen is used to enter certain information about you, the user (Figure 2-6).



The image shows a Windows-style dialog box titled "Objecteering/UML Setup". It has a blue title bar with a close button (X) in the top right corner. The main content area is white and contains the following elements:

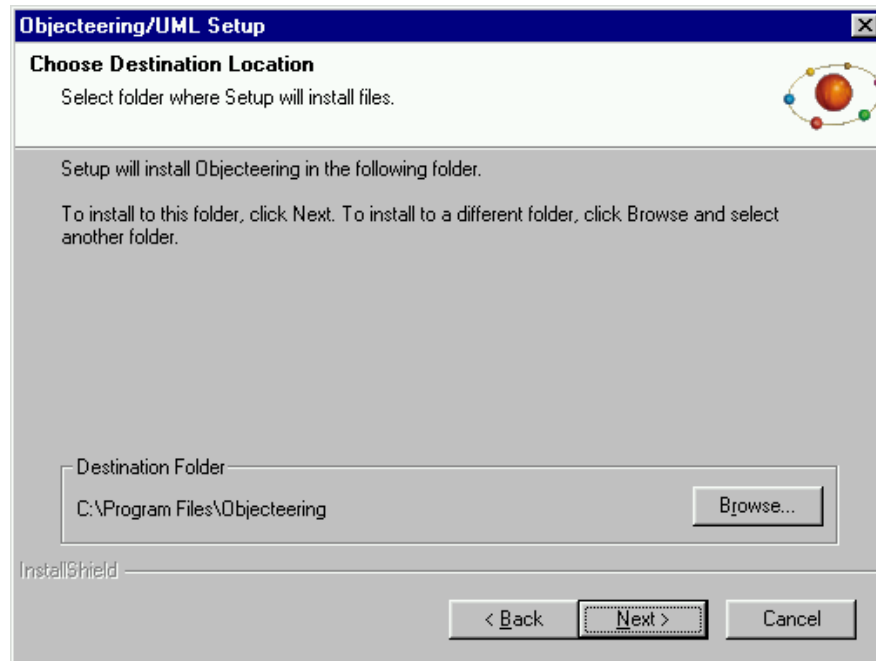
- Customer Information**: A section header in bold.
- Please enter your information.**: A line of text.
- Please enter your name and the name of the company for whom you work.**: A line of text.
- User Name:**: A label followed by a text input field containing "John Smith".
- Company Name:**: A label followed by a text input field containing "Objecteering Software".
- InstallShield**: A small logo in the bottom left corner.
- Navigation buttons**: Three buttons at the bottom right: "< Back", "Next >", and "Cancel".

In the top right corner of the white area, there is a small graphic of a globe with several colored dots (yellow, red, green, blue) orbiting it.

**Figure 2-6.** Entering user information

Enter your name and your company name, and then click on the "Next" button to continue.

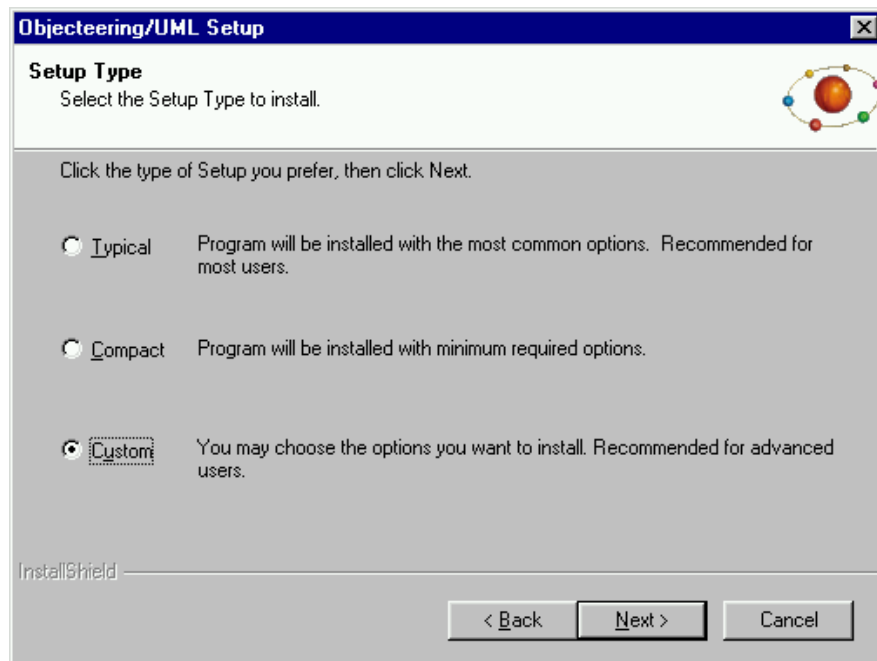
## Choosing the destination location



**Figure 2-7.** Choosing the destination location

This window only appears if you do not already have a version of Objecteering/UML installed on your machine. If a version of Objecteering/UML already exists on your computer, the screen shown in Figure 2-1 will appear.

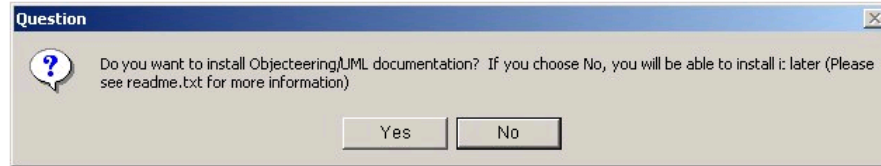
## Choosing the setup type



**Figure 2-8.** Selecting the setup type

Select the installation type ("*Typical*", "*Compact*" or "*Custom*") and click on the "*Next*" button.

If you select the "*Typical*" installation, a question box then appears, asking you whether or not you wish to install the Objectteering/UML on-line documentation (Figure 2-9).

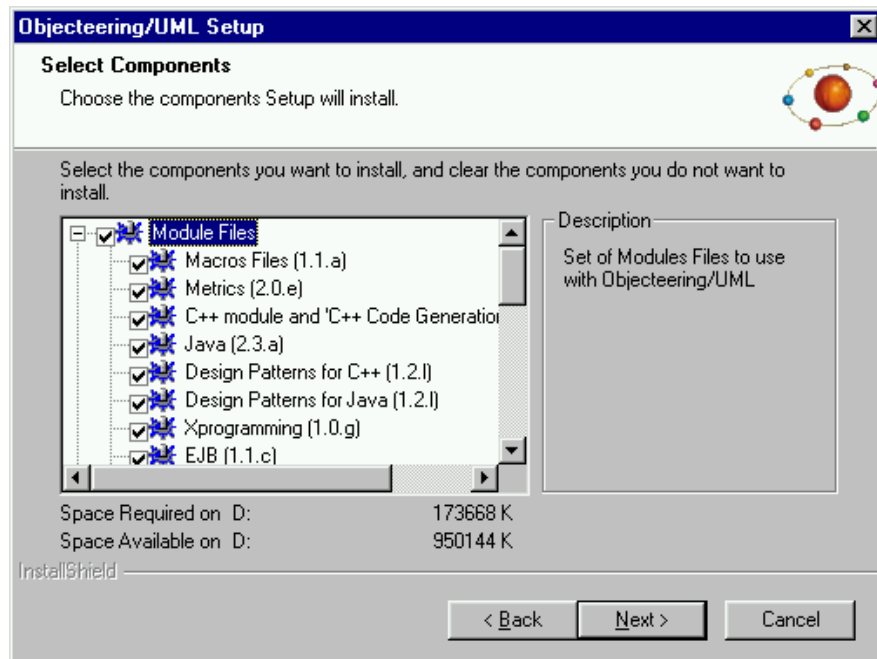


**Figure 2-9.** Choosing whether or not you want to install Objectteering/UML on-line documentation

Simply click on "Yes" or "No" and proceed with your installation.

If you select the "*Custom*" installation type, the "*Select Components*" window then appears (Figure 2-10).

## Selecting components



**Figure 2-10.** Selecting components

Select the components you wish to install by checking the relevant tick boxes, and then click on the "Next" button to continue.

Note: This window is automatically displayed during reinstallation of Objectteering/UML.

To define those modules you wish to install, click on "Module Files" and then select the modules you wish to install. Confirm, by clicking on the "Next" button.



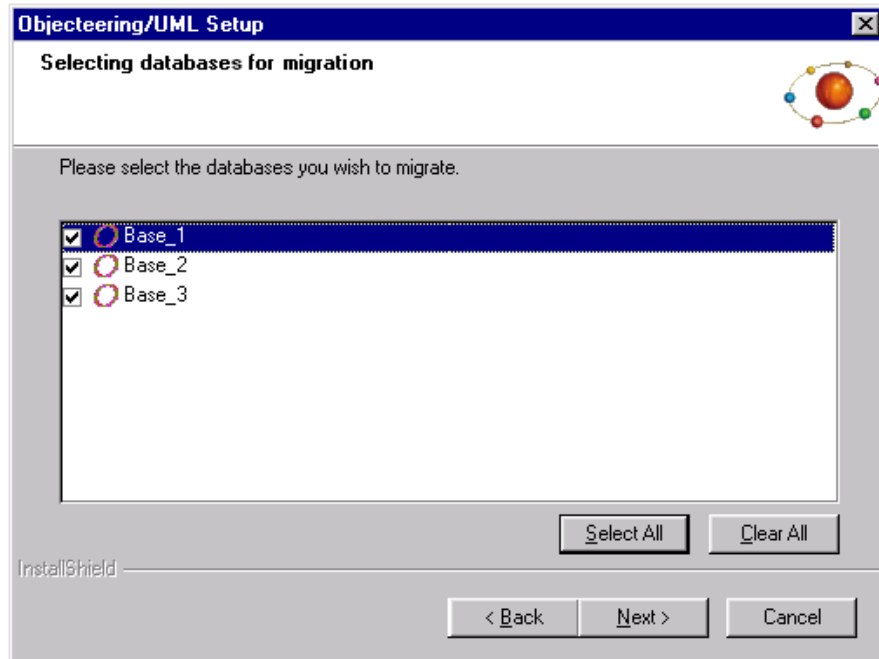
## Migrating databases

After selecting components, the "Selecting database for migration" window appears.

If your site contains databases which must be migrated into the 5.2.2 version of Objectteering/UML, you should simply select them in this window, by checking the relevant tickboxes (as shown in Figure 2-11).

The databases which appear in this window are those which are declared on your site, and which are visible from the post on which you are running the installation procedure.

If there are no databases to be migrated, the "Selecting database for migration" window is empty.





**Figure 2-11.** Selecting databases to be migrated

Simply select the databases you wish to migrate, and click on "*Next*" to continue. To select all the databases in the list, click on the "*Select all*" button. To unselect all selected databases, click on the "*Clear all*" button.

Note: If you do not migrate databases at this stage, when you open the databases in question, their migration is automatically proposed (for more information, please refer to the "*Receiving and upgrading UML modeling projects*" section in chapter 3 of the *Objectteering/UML Modeler* user guide).

## Delivering and migrating modules

After selecting databases to be migrated, the "Selecting modules to deliver and migrate" window appears.

This window contains a list of modules either already installed on your site and now available in a later version, or not installed on your site and available with the version of Objectteering/UML you are installing. Modules presented with the  icon are modules included in the packaging of Objectteering/UML and which can be delivered to your site, whilst modules presented with the  icon are those which already exist on your site in an earlier version and which can be migrated.

To select the modules you wish to deliver and/or migrate, you should simply check the relevant tickboxes (as shown in Figure 2-12).

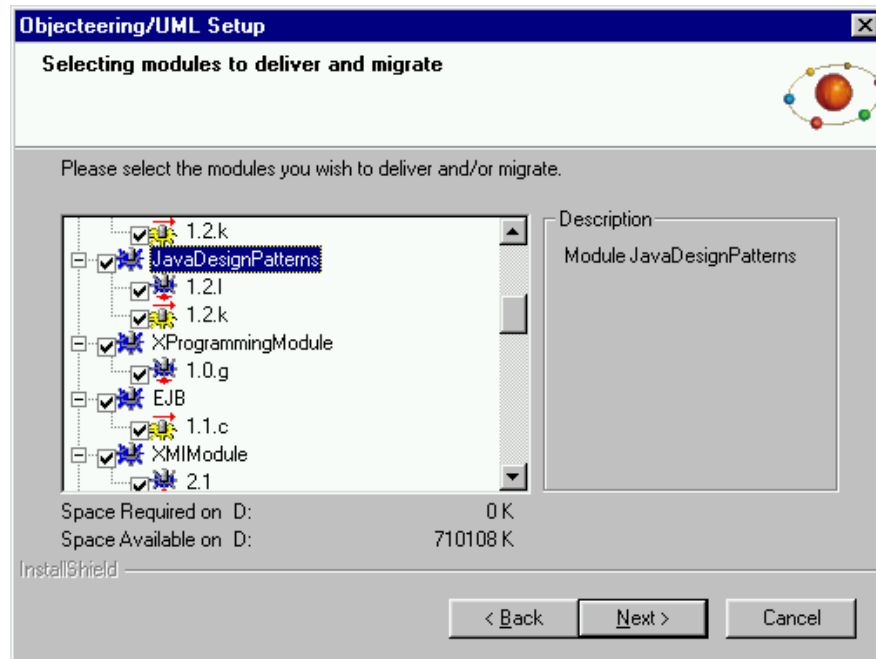
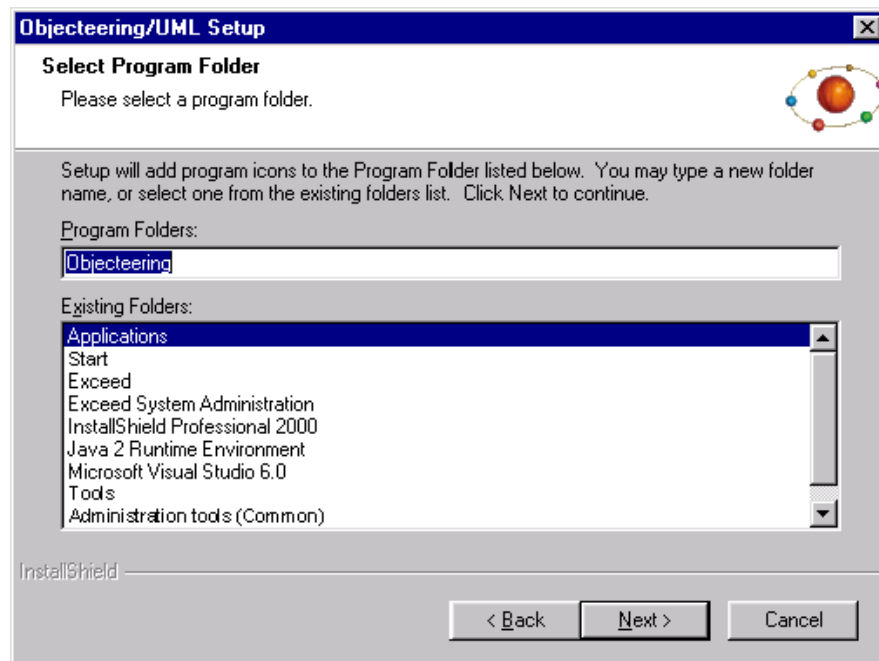


Figure 2-12. Selecting modules to deliver and migrate

## Selecting the program folder

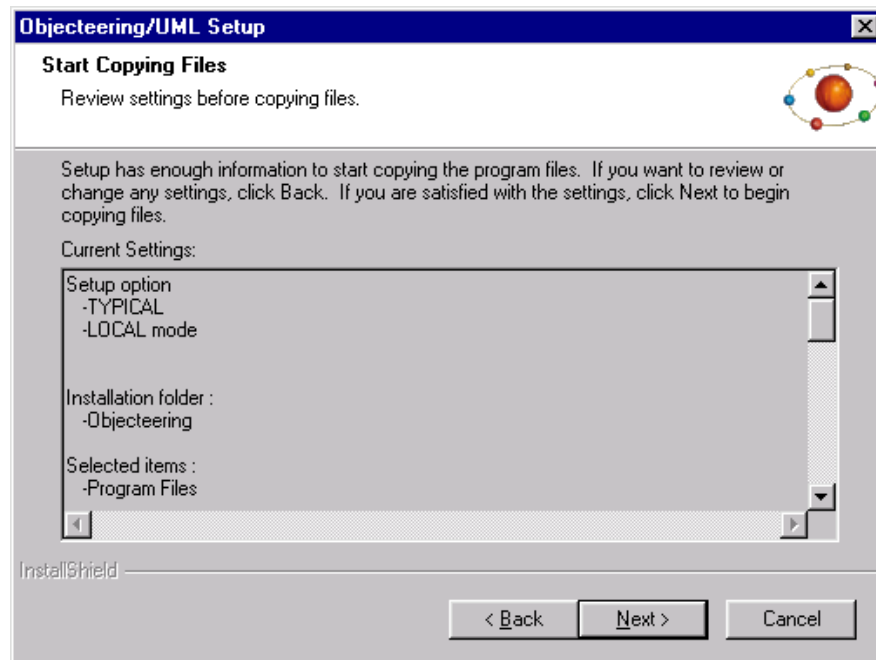


**Figure 2-13.** Selection of the program file

Select the "*Program Folder*" and click on the "*Next*" button.

## Starting to copy files

Once you have completed all the above dialog boxes, the following window will appear (Figure 2-14):

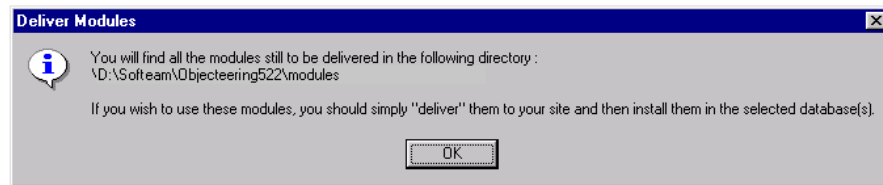


**Figure 2-14.** Information dialog box for copying the program files

Click on the "Next" button. You can visualize the progress of your installation.

## Information on modules

Just before the end of your installation, the following window (Figure 2-15) appears, indicating where the Objecteering/UML modules which have not yet been delivered are located.



**Figure 2-15.** Window indicating the location of the modules delivered

To use these modules, simply double-click on the relevant ".*prof*" file in OBJING\_PATH\Modules, and then select them in your UML modeling project.

## End of installation

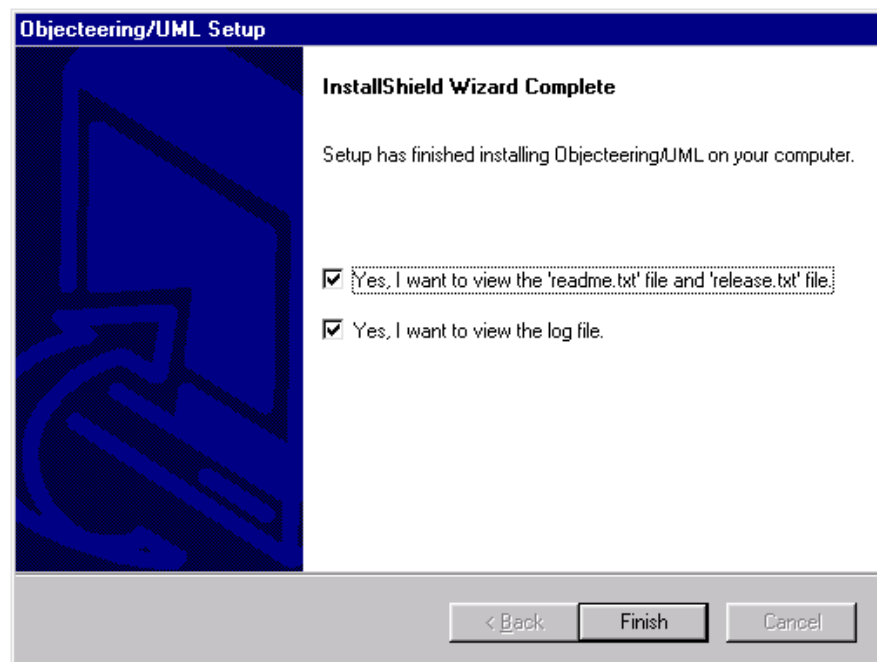


Figure 2-16. The "Setup complete" window

Click on the "Finish" button to complete installation and visualize the readme.txt and release.txt files, which provide additional information on the Objecteering/UML tool, and the log file, which provides information on the installation just carried out. If you do not wish to visualize these files, uncheck the tick boxes.

---

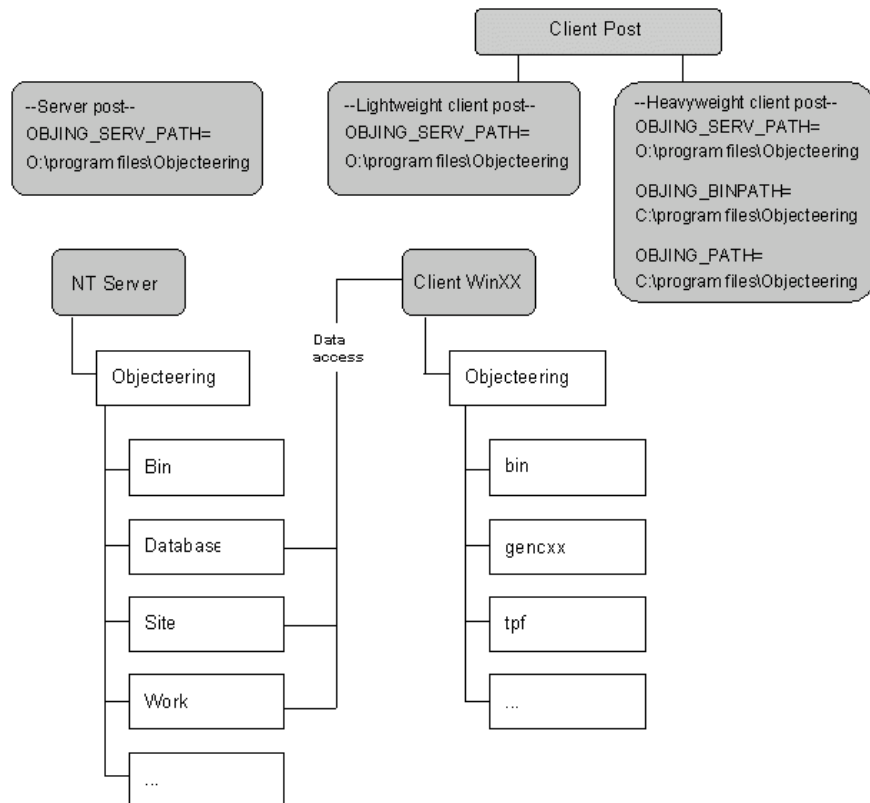
## Server installation in Windows

---

Several users can connect to the same "*site*". In this configuration, UML modeling, UML profiling and document template projects are accessed directly by the Objectteering/UML site server. This type of installation requires an update of the *TCP/IP services* and of the registry, and must be carried out on the server and on all the client stations. The server must be in Windows NT (Windows NT 4.0 Server or workstation).



Figure 2-17 below shows the client and server access.



**Figure 2-17.** Client-server functioning

**Note:** The TCP/IP layer on the server machine must have previously been installed.

It is strongly recommended that you follow the example below when installing the Objectteering/UML server.

## **Steps to carry out before starting server installation**

Before launching the server installation procedure itself, you must make sure that the installation directory is accessible from the network.

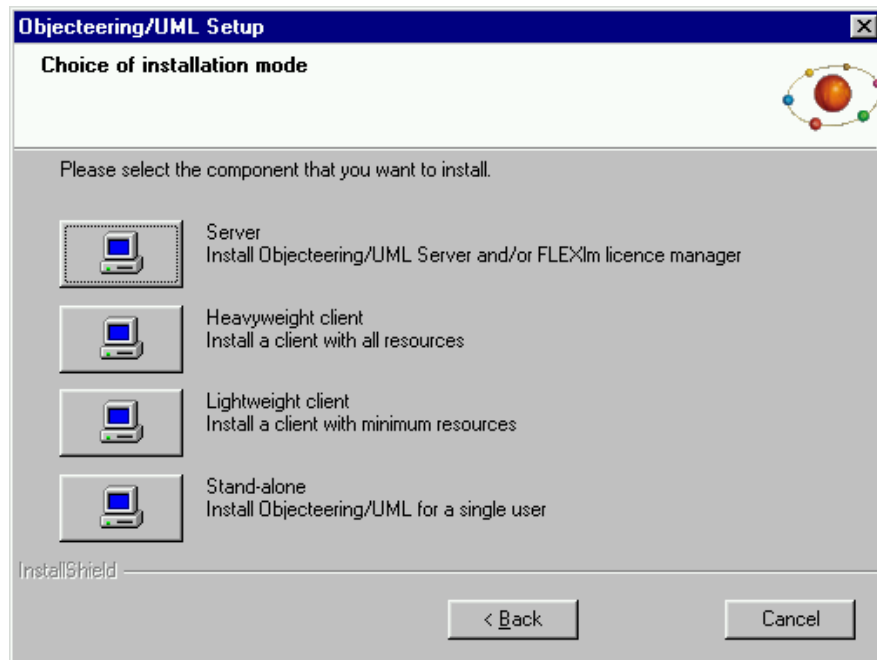
If this is not the case, the installation directory or its parent directory must be shared.

You can now proceed with server installation.

## Selecting the Server installation mode

Run the installation procedure in the same way as for a "*single station*" installation.

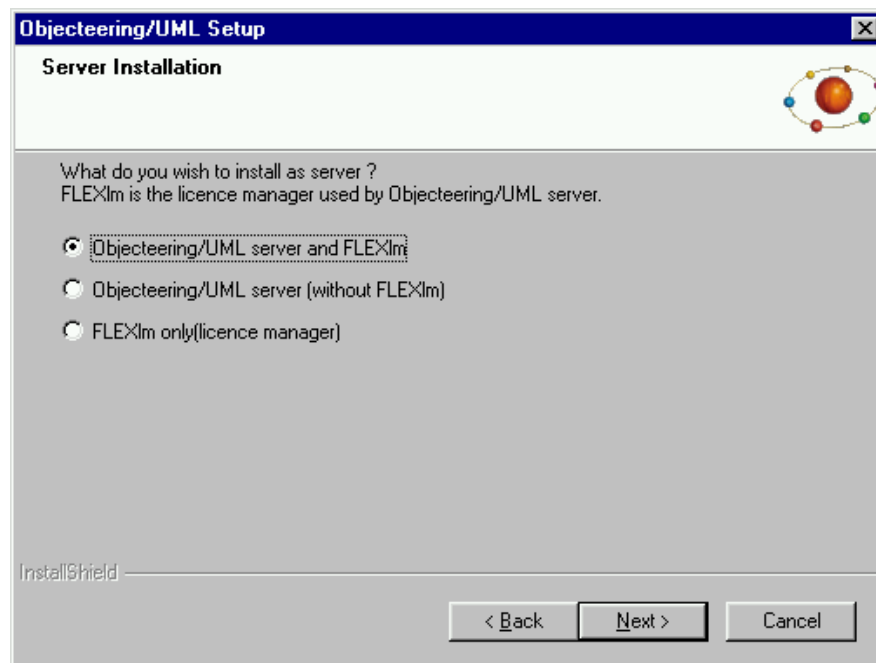
When entering the installation mode, select the "*server*" mode (figure 2-18).



**Figure 2-18.** Choice of installation mode

Confirm by clicking on the "*Next*" button.

The following window (shown in Figure 2-19) then appears. In this window, indicate what kind of server you wish to install.



**Figure 2-19.** Selecting what kind of server you wish to install

The "*Objectteering/UML server and FLEXlm*" option is used to install the FLEXlm license server and Objectteering/UML in server mode on the same machine.

The "*Objectteering/UML server (without FLEXlm)*" implies that you already have a FLEXlm installation (version 7.2 or later) on the server or accessible via the network.

The "VENDOR" line and all the "FEATURES" of the Objectteering/UML license file must be inserted into the license used by FLEXlm, with the exception of the "*Objing\_Site*" feature. These modifications will be carried out by the Objectteering Software technical support team.

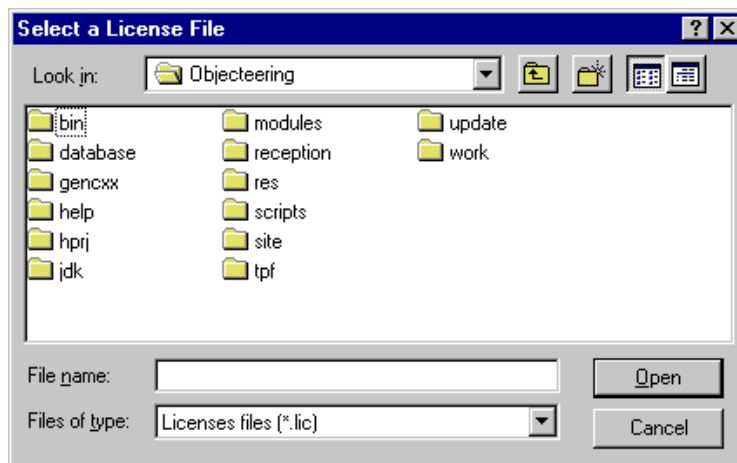
The "*FLEXlm only (license manager)*" options is used to install only FLEXlm. A license file will be requested during installation.

If you provide the Objectteering/UML license file, you must already have withdrawn the "*Objing\_Site*" feature from it. These modifications will be carried out by the Objectteering Software technical support team.

If you opt for an installation which separates FLEXlm from Objectteering/UML, please inform your Objectteering Software at [support@objectteering.com](mailto:support@objectteering.com).

Make your choice and confirm by clicking on the "*Next*" button.

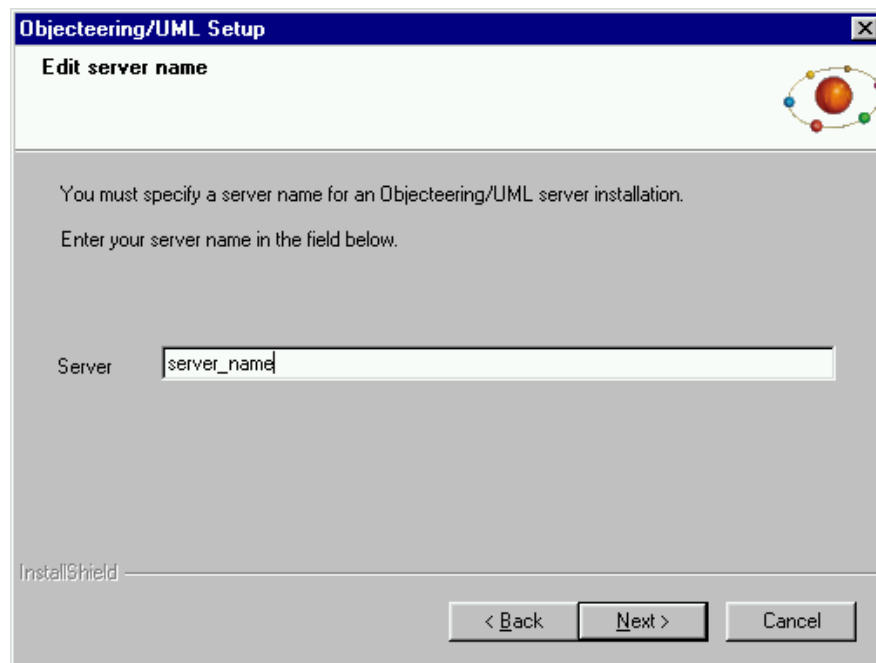
The following window (shown in Figure 2-20) then appears. In this window, enter the location of your license file.



**Figure 2-20.** The license selection window

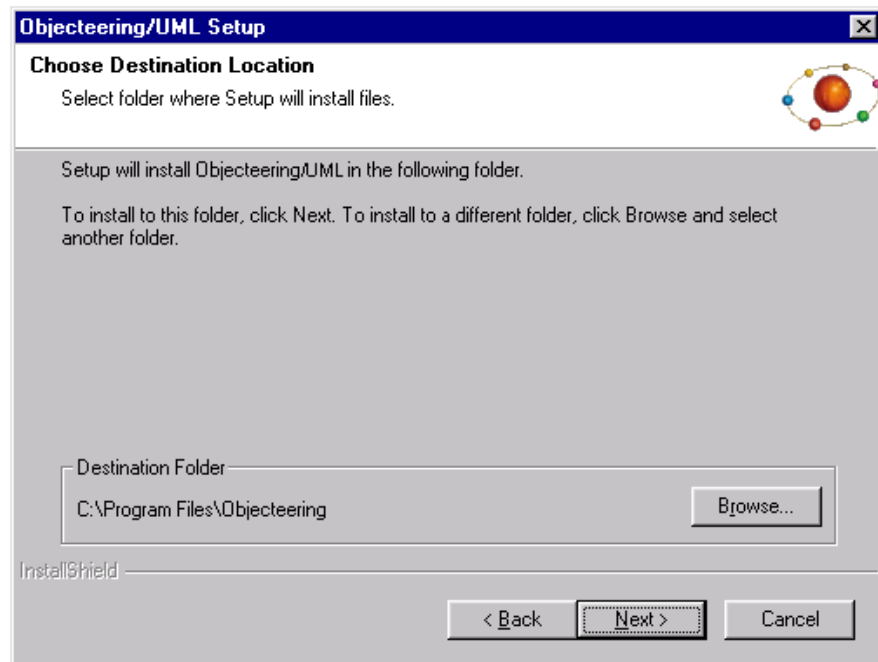
Browse in this explorer and select the license file sent to you by Objecteering Software.

Once you have selected your license, the next window then appears. In this new window you should specify the name of your server (as shown in Figure 2-21).



**Figure 2-21.** Entering your server name

Once you have entered your server name, continue by entering the installation location (as shown in Figure 2-22).



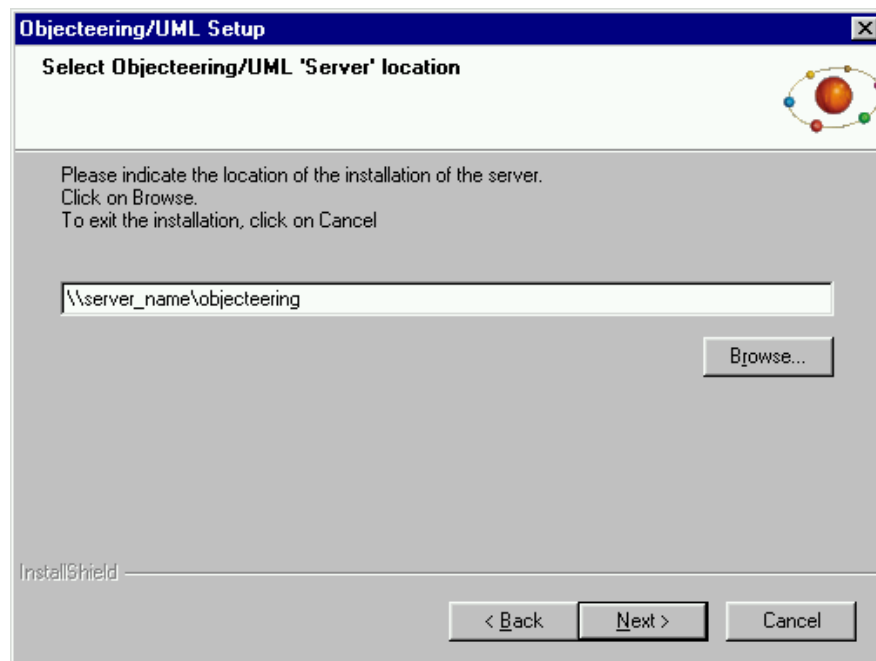
**Figure 2-22.** Entering the installation location

Simply enter the folder where you wish to install Objecteering/UML. You may use the browse button to make selection even easier.

Note: Please note that the directory in which you choose to install Objecteering/UML must have the same name as the directory you have mapped as network drive, in our example "*Objecteering*".



The next step is to indicate the location of the server, which will be used by all the clients (Figure 2-23).

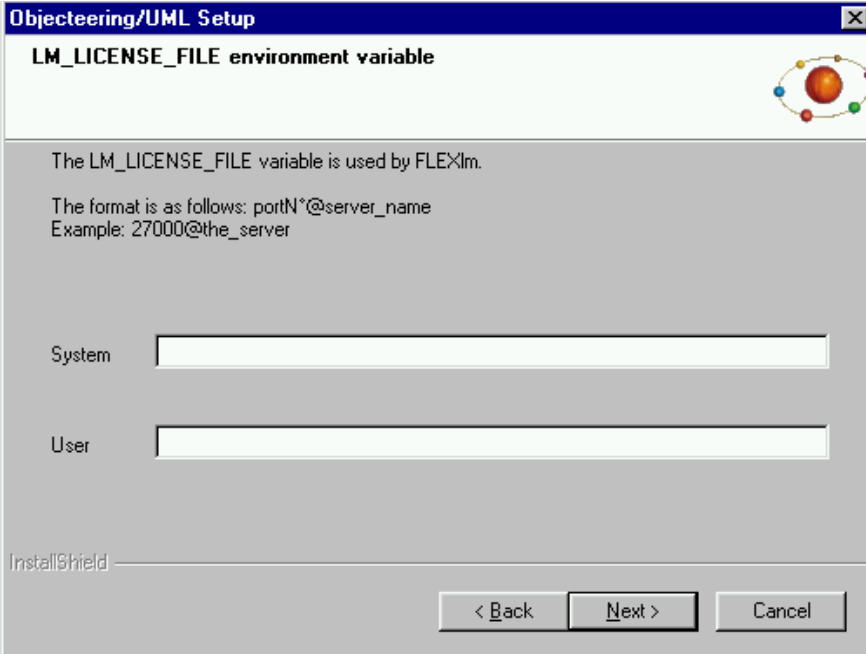


**Figure 2-23.** Indicating the server which is to be used

Simply indicate the server you have already installed. Make sure you select the site's parent directory.

Note: Please note that the network drive indicated must have the same name as the directory in which you have chosen to install Objecteering/UML (in our example, "*Objecteering*").

The next step is to enter the system and user environment variables (as shown in Figure 2-24).



The dialog box is titled "Objecteering/UML Setup" and has a sub-header "LM\_LICENSE\_FILE environment variable". It includes a logo in the top right corner. The main text area contains the following information:

The LM\_LICENSE\_FILE variable is used by FLEXlm.

The format is as follows: portN\*@server\_name  
Example: 27000@the\_server

Below the text are two input fields: "System" and "User".

At the bottom left, there is a label "InstallShield". At the bottom right, there are three buttons: "< Back", "Next >", and "Cancel".

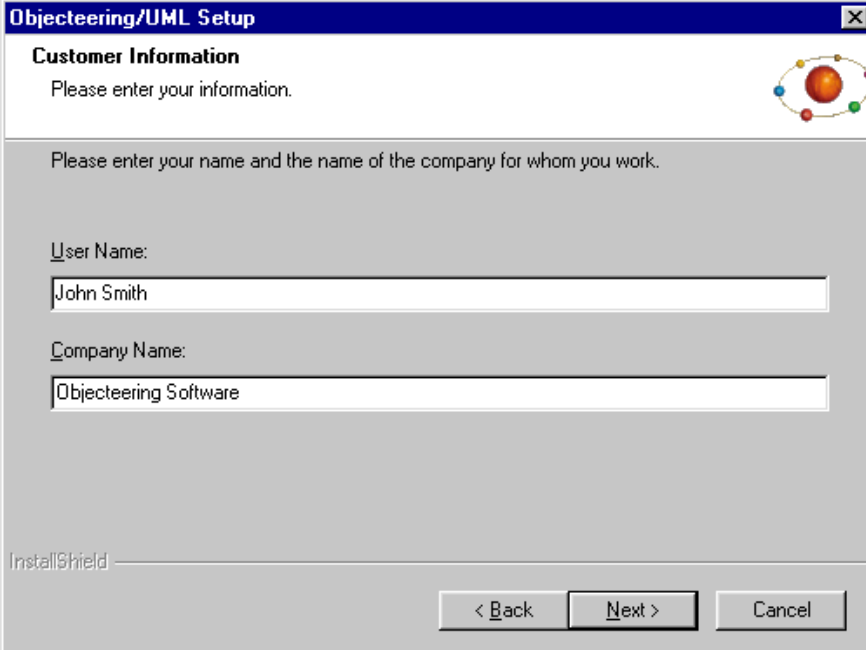
**Figure 2-24.** Entering the LM\_LICENSE\_FILE environment variable

In the "*System*" field, enter the LM\_LICENSE\_FILE environment variable for your machine.

In the "*User*" field, enter the LM\_LICENSE\_FILE environment variable for your particular user ID.

**Note:** For further information on the LM\_LICENSE\_FILE environment variable, please refer to the "*The LM\_LICENSE\_FILE environment variable*" section in the current chapter of this user guide.

Continue by entering your name and company name (as shown in Figure 2-25).

The image shows a Windows-style dialog box titled "Objectteering/UML Setup". It has a blue title bar with a close button (X) in the top right corner. The main area is white and contains the text "Customer Information" followed by "Please enter your information." Below this is a grey rectangular area containing the instruction "Please enter your name and the name of the company for whom you work." There are two text input fields: the first is labeled "User Name:" and contains the text "John Smith"; the second is labeled "Company Name:" and contains the text "Objectteering Software". At the bottom left of the grey area is the "InstallShield" logo. At the bottom right are three buttons: "< Back", "Next >", and "Cancel". A small icon of a globe with colored dots is in the top right corner of the white area.

**Objectteering/UML Setup**

**Customer Information**  
Please enter your information.

Please enter your name and the name of the company for whom you work.

User Name:  
John Smith

Company Name:  
Objectteering Software

InstallShield

< Back   Next >   Cancel

**Figure 2-25.** Entering your user name and company name

Enter a user name and the name of your company.

From this point on, server mode installation is identical to stand alone installation (for further details, please refer to the "*Stand alone installation in Windows*" section in the current chapter of this user guide.

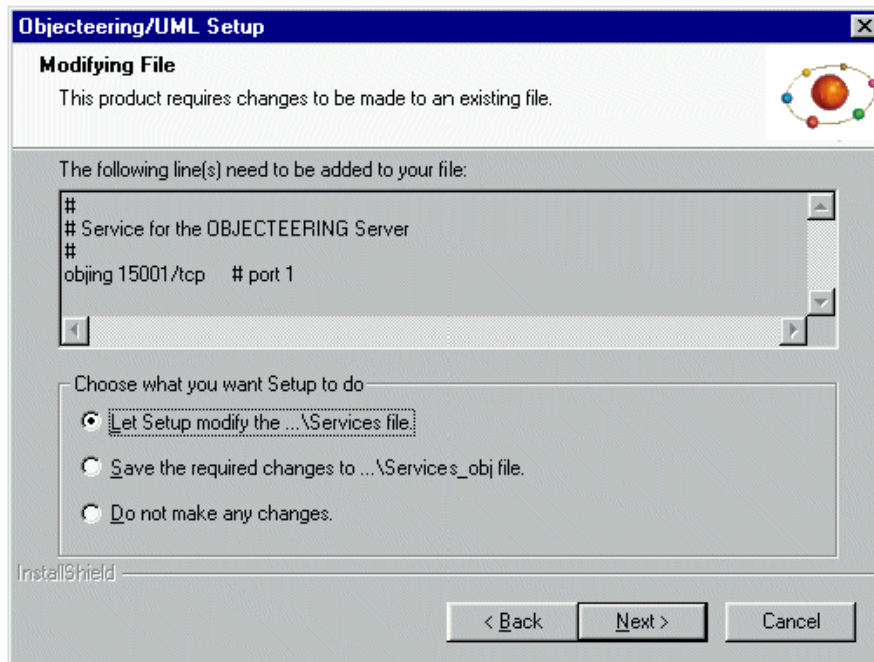
## TCP/IP configuration

In client or server installation mode, the installation requires that the user declare a TCP/IP service, used to run the server, if this does not already exist.

The following dialog box (Figure 2-26) opens and asks the user whether the installation procedure should automatically modify the port/service numbers present in the "services" file.

Note 1: By default, the "Services" file is automatically modified.

Note 2: The option of saving modifications in the "Services\_obj" file allows you to manually transfer the modifications into the "Services" file once the installation is complete.



**Figure 2-26.** Dialog box for modifying the file

Warning! In the event of modifications being made, the blanks at the end of lines must be kept, for example, by adding comments:

```
#  
# Objecteering site server  
#  
objing 15001/tcp # port no 1
```

The numbers chosen are arbitrary, but:

- ◆ they must be identical for all the Objecteering/UML site machines
- ◆ they must not be the same as service ports existing in the file
- ◆ they must not be above 1024

## Completing the installation

OBJING\_BINPATH specifies access to all the Objectteering/UML binary files.

OBJING\_PATH specifies access to the files ensuring the site's administration.

Check that the ports are correctly configured. From the explorer, edit the following file:

```
WINNT\system32\drivers\etc\Services
```

## Modules

In "*Server installation*" mode, all the .prof files of the Objectteering/UML modules delivered are installed on the server. To install them, simply double-click on the .prof in question.

## Activating the Objectteering/UML site server

The Objectteering/UML site server, which is an NT service, can be activated:

- ◆ in all cases, on the machine declared site server
- ◆ on machines possibly used as the model servers of this site

The Objectteering/UML installation procedure automatically creates a server named "*FpServer*".

At the end of the installation procedure, this service is run automatically. Several administration operations still need to be carried out in order to activate this service. It is possible to change its running mode, so that the service is activated when the machine is started up (by default, this is in manual mode), or so that the user is associated to it.

## Activating the FlexIm service

The Objectteering/UML installation procedure automatically creates a license management server procedure called "*FlexIm Objectteering*".

At the end of the installation procedure, this service is automatically launched. By default, the launch mode is set to automatic.

## **Activating the Objectteering/UML server and the Flexlm service manually**

If Objectteering/UML is installed in a directory which is mapped as a network drive, the Objectteering/UML server and the Flexlm service should be activated manually. These services are successfully installed, but are not launched automatically, since they attempt to start as the "LocalSystem", whereas they must start as a user.

In order to activate the Objectteering/UML server and the Flexlm service for an Objectteering/UML server installed on a network drive, go into the control panel, open the "Services" dialog box, double-click on the services in question and modify their startup parameters.

The user account selected must have administrator access rights for the NT work station. We recommend that you use an account provided by the system, in order to avoid any potential problems in the case of account deletion.

Once these steps have been carried out, the Objectteering/UML server and the Flexlm service can be manually started, and will run correctly the next time the machine is started up.

## **Preparing to install the client station**

The client station is installed in a standard way, except that the site's licenses do not need to be provided, since they are centralized in the server. UNC (Unified Naming Convention) names can be used. On the client station, the installation directory of the server must be connected to the same network letter as the server station.

The letter of the connected network must be identical to the one specified during the installation of the Server station. Connection to this network must be realized before a Windows Client installation procedure.

---

## Client installation in Windows

---

This installation in client mode is used to access an NT or Unix server.

Note 1: The server must previously have been installed.

Note 2: The TCP/IP layer on the client machine must have previously been installed.

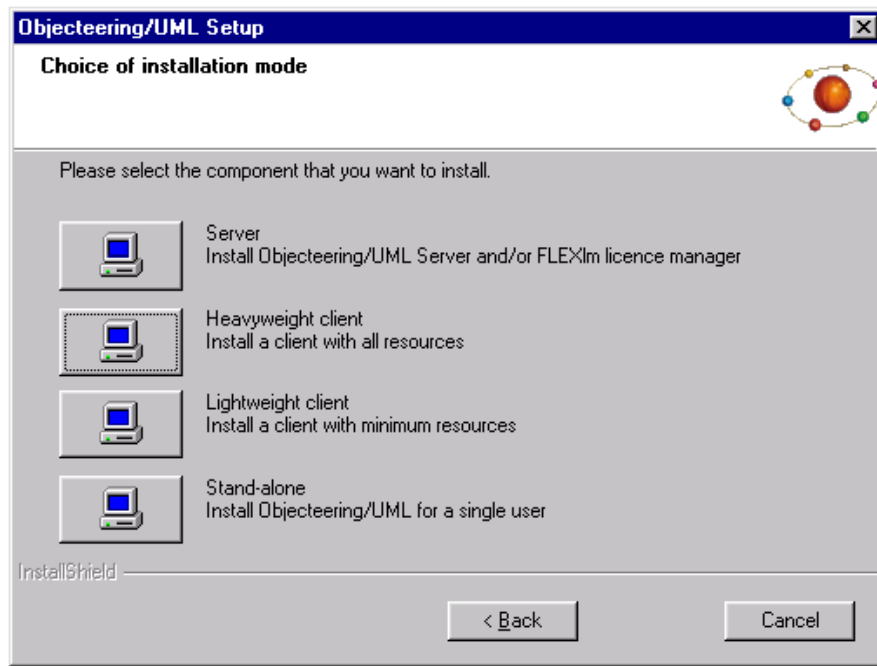
UNC paths can be used, or if you wish, you can connect a network drive directed towards the Objectteering/UML installation directory on the server.

Warning! The letter of the network drive on the client must be the same as the server's letter.

Launch "*Setup*" from the CD ROM and confirm the license dialog box by clicking on the "*Next*" button. Select one of the "*Client*" mode (as shown in Figure 2-27).

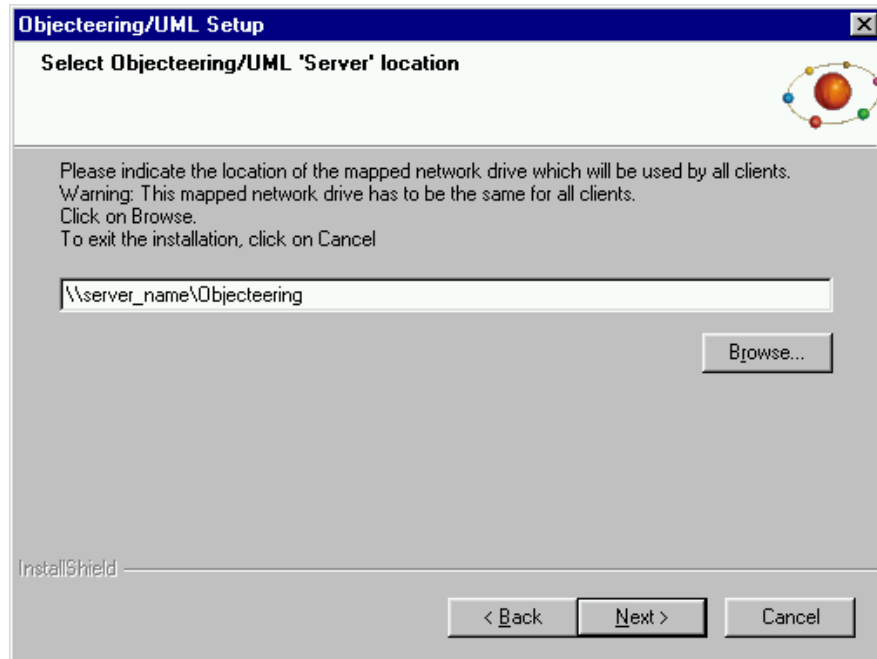
Note: Heavyweight client and lightweight client modes are similar. The main difference between the two modes is that when a heavyweight client uses a resource, it speaks to the server, obtains the resource, and if it does not exist locally, copies it locally, whereas a lightweight client speaks to the server every time.





**Figure 2-27.** Selecting the "*Heavyweight client*" installation mode

Choose the location of the server installation (Figure 2-28).



**Figure 2-28.** Selection of a server directory

f the Objecteering/UML server is a UNIX station, you must then be able to access the UNIX directory from your Client Windows post and to transfer it into this selection dialog box.

If the directory entered does not contain the Objectteering/UML server installation, the following dialog box will appear (Figure 2-29):



**Figure 2-29.** Objectteering/UML installation directory server incorrect

Confirm the user information dialog box by clicking on the "Next" button.

Confirm the installation directory selection dialog box by clicking on the "Next" button (please see the "*Stand alone*" section earlier in this chapter).

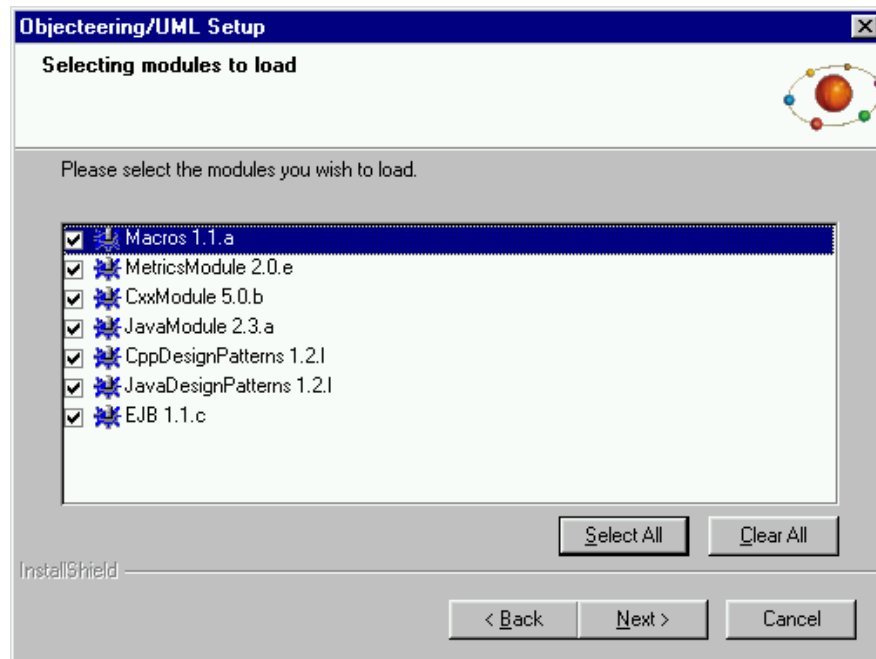
For heavyweight client installation, the window shown in Figure 2-30 then appears, indicating that modules are being searched for on the site.



**Figure 2-30.** Window indicating the progress of module searching for heavyweight client installation

Once modules have been located, continue by selecting the components you wish to install (please see the "*Stand alone*" section earlier in this chapter).

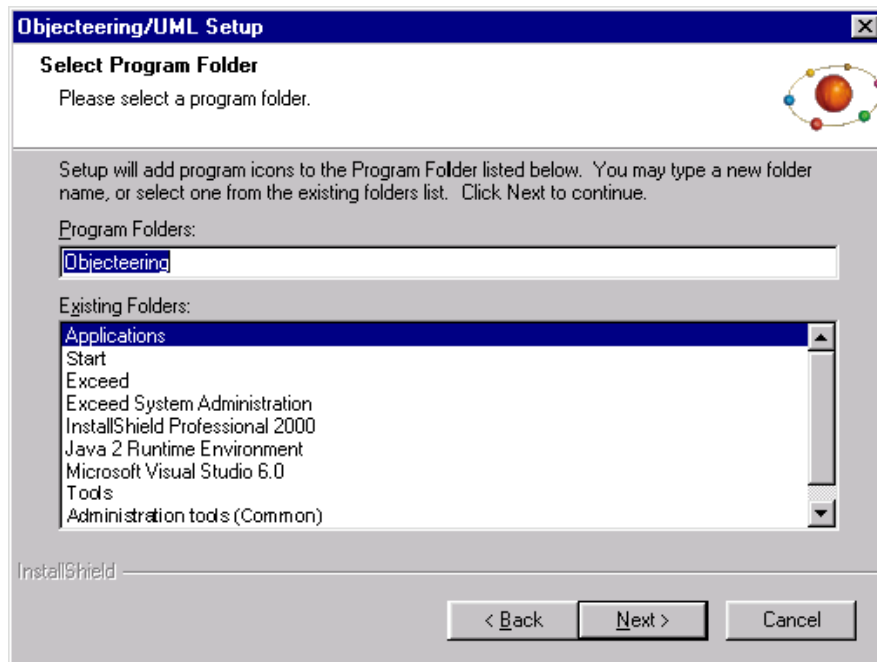
After selecting components, the window shown in Figure 2-31 then appears.



**Figure 2-31.** Selecting the modules you wish to load from the server

In this window, all the modules found on the server are listed. Simply check the tickboxes of the different modules you wish to load from the server onto your heavyweight client installation, and then click "Next" to continue.

Continue by selecting the program folder desired and then confirm the window by clicking on the "Next" button.

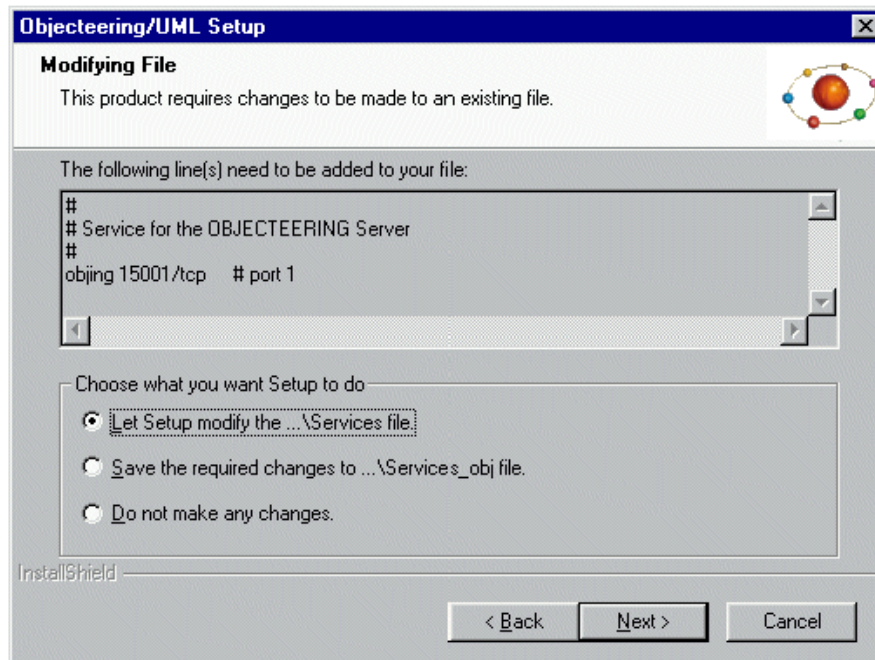


**Figure 2-32.** Selection of the program file

Confirm the modification dialog box for the "Services" file (figure 2-33) after consulting the service number proposed by the Objecteering/UML server, by clicking on the "Next" button.

By default, the "Services" file is automatically modified.

The option of saving the modifications in the "Services\_obj" file will allow you to manually carry out modifications in the "Services" file, once installation is complete.

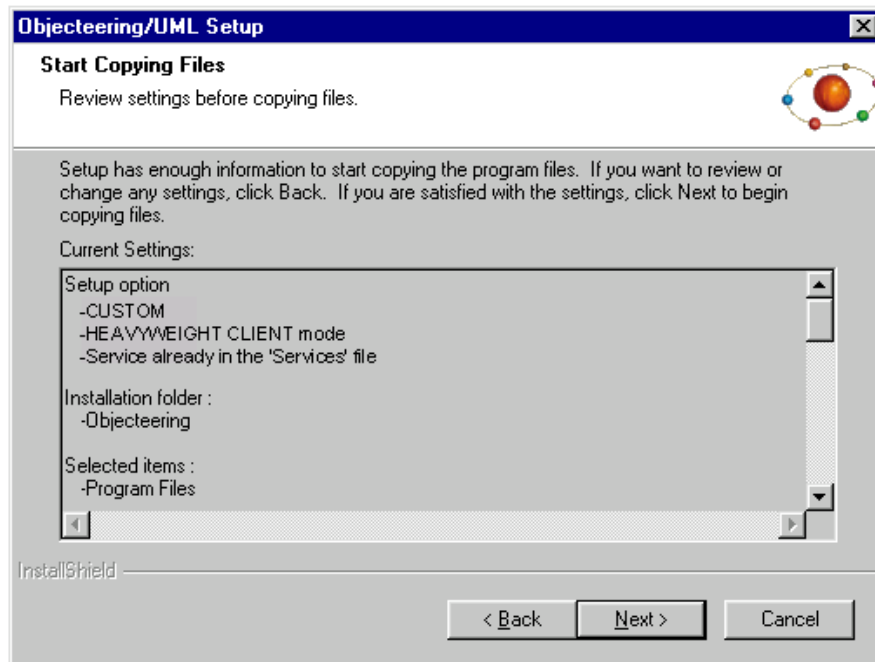


**Figure 2-33.** Modification of the *Services* file

Confirm the "Copying program files" dialog box by clicking on the "Next" button, after having checked the different options displayed.

If one of the displayed options is not appropriate, it is possible to go back to the last ones by clicking on the "Back" button.

By clicking on the "Next" button, the copying of the files will start (as shown in Figure 2-34).



**Figure 2-34.** Display of installation options

Once all files have been copied onto your disk, the client Windows installation is complete.

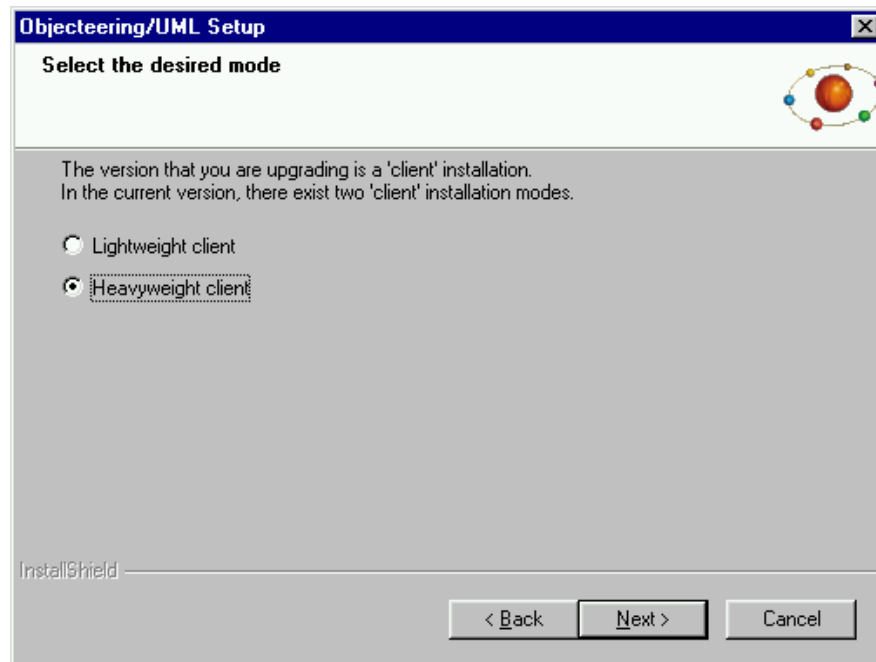
Refer to the *Confirmation TCP/IP* section of the server to check the service numbers necessary to the Objecteering/UML server in the "Services" file.

## Modules

In "*Client installation*" mode (for both heavyweight and lightweight clients), all the .prof files of the Objecteering/UML modules delivered are installed on the server. To install them, simply double-click on the .prof in question.

## Migrating a client installation

When migrating a client installation which predates version 5.1 of Objecteering/UML, the following window (Figure 2-35) will appear. In this window, you should indicate whether or not you wish to migrate to a lightweight client installation or a heavyweight client installation.



**Figure 2-35.** Selecting to upgrade a client installation to a lightweight or heavyweight client

---



## Objectteering/UML tools in Windows

---

### The Objectteering/UML tools

The "Start/Programs/Objectteering" menu is used to run the following tools:

- ◆ *Examples*: this is used to launch the demonstration UML modeling project, "VendingMachine".
  - ◆ *Help*: this allows you to access the online Objectteering/UML help, including the *Objectteering/Introduction* that contains *Objectteering's First Steps*. For Windows, the html "browser" is defined by default.
  - ◆ *Uninstall*: this allows you to run the Objectteering/UML uninstallation procedure.
  - ◆ *Administration*: this allows the creation or repair of Objectteering/UML UML modeling, UML profiling and document template projects, as well as the managing of their physical properties. Modules are also managed via this tool.
  - ◆ *Objectteering UML Modeler*: this allows you to run Objectteering/UML Modeler version 5.2.2.
  - ◆ *Objectteering UML Profile Builder*: this allows you to run Objectteering/UML Profile Builder version 5.2.2.
  - ◆ *Reinitialize site number*: this is used to reinitialize your site number, after an event such as a change in license.
  - ◆ *Search engine*: this allows you to run the Objectteering/UML on-line help search engine.
-

# Installing in UNIX

---

## Introduction

This section presents the procedure to be followed, when carrying out the installation of Objecteering/UML on a UNIX platform. UNIX platforms supported are Solaris and LINUX, and the installation procedure for these two platforms is the same.

This section is addressed to any person reasonably accustomed with the use and administration of UNIX machines.

This phase includes:

- ◆ the installation of Objecteering/UML
- ◆ the initialization of the information specific to your site

## Different installation modes

- ◆ Installation over a previous version
- ◆ Client-server configuration

## Prerequisites

To carry out an Objecteering/UML installation, you must have the CD-ROM and the licence file supplied by Objecteering Software.

The product's general characteristics are as follows:

- ◆ disk resources: 150 Mo
- ◆ average installation time: 30 minutes

The licenses required are as follows:

- ◆ a license to possibly add a file in an X11 directory
- ◆ the right to be able to run the "*objingsrv*" server at the start-up of the UNIX machine
- ◆ the "*/etc/services*" file must be modified. You must have the "*root*" user in order to update it.

## Procedure

There are two steps involved in the installation of Objecteering/UML:

- ♦ the setting up of the CD-ROM
- ♦ the running of the installation program

Please see the "*Installing licenses*" section of the current chapter of this user guide.

## Locating information

It is recommended that you install Objecteering/UML in the /usr/objecteering directory. This directory is later named *<installation\_directory>*. If the server is being installed, clients must be able to access this directory through NFS.

If you are re-installing, it is strongly recommended that you make a backup copy of the installation directory before re-installation.

## Setting up the CD-ROM

The following example applies to an installation in Sun Solaris 2.4 (X11R.5). For LINUX, the installation procedure is the same.

In Solaris, the CD-ROM is generally set up automatically by the system just after the CD-ROM has been inserted in the drive. To check it, make sure the */cdrom/cdrom0* directory contains the *SETUP* file. If the set up has to be carried out manually, use the following command under root:

```
% mkdir /cdrom
% mount -r -F hsfs /dev/sr0 /cdrom
```

If the CD-ROM drive is only accessible through the network, the procedure, under root, is as follows:

- ◆ if the drive is not automatically set up by the station which owns the CD-ROM, use the following command on this station:

```
% mkdir /cdrom
% mount -r -F hsfs /dev/sr0 /cdrom
% share -o ro /cdrom
```

Then on Objecteering/UML's installation station:

```
% mkdir /cdrom
% mount -r <station_name_with_CD>:/cdrom/cdrom
```

- ◆ if the drive is automatically set up by the station which owns the CD-ROM, use the following command on this station after having inserted the CD-ROM :

```
% share -o ro /cdrom/O43_SOL
```

Then on Objecteering/UML's installation station:

```
% mkdir /cdrom
% mount -r <station_name_with_CD>:/cdrom/O43_SOL/cdrom
```

## Installing from the CD ROM

In the Objectteering/UML administrator's UNIX account, position yourself in the CD-ROM set directory:

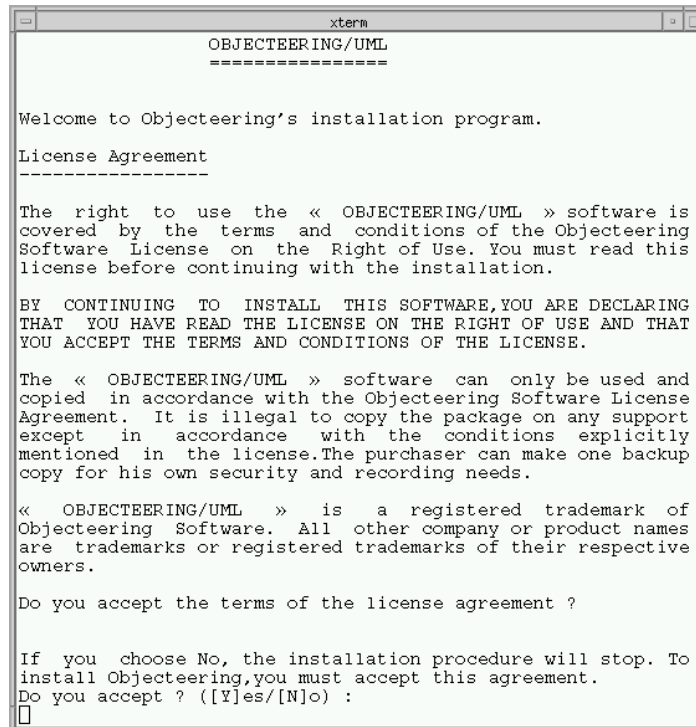
```
% cd /cdrom/cdrom0
```

or

```
% cd /cdrom
```

Run SETUP. This will start the installation procedure.

```
% ./SETUP
```



```
xterm
OBJECTTEERING/UML
=====

Welcome to Objectteering's installation program.

License Agreement
-----

The right to use the « OBJECTTEERING/UML » software is
covered by the terms and conditions of the Objectteering
Software License on the Right of Use. You must read this
license before continuing with the installation.

BY CONTINUING TO INSTALL THIS SOFTWARE, YOU ARE DECLARING
THAT YOU HAVE READ THE LICENSE ON THE RIGHT OF USE AND THAT
YOU ACCEPT THE TERMS AND CONDITIONS OF THE LICENSE.

The « OBJECTTEERING/UML » software can only be used and
copied in accordance with the Objectteering Software License
Agreement. It is illegal to copy the package on any support
except in accordance with the conditions explicitly
mentioned in the license. The purchaser can make one backup
copy for his own security and recording needs.

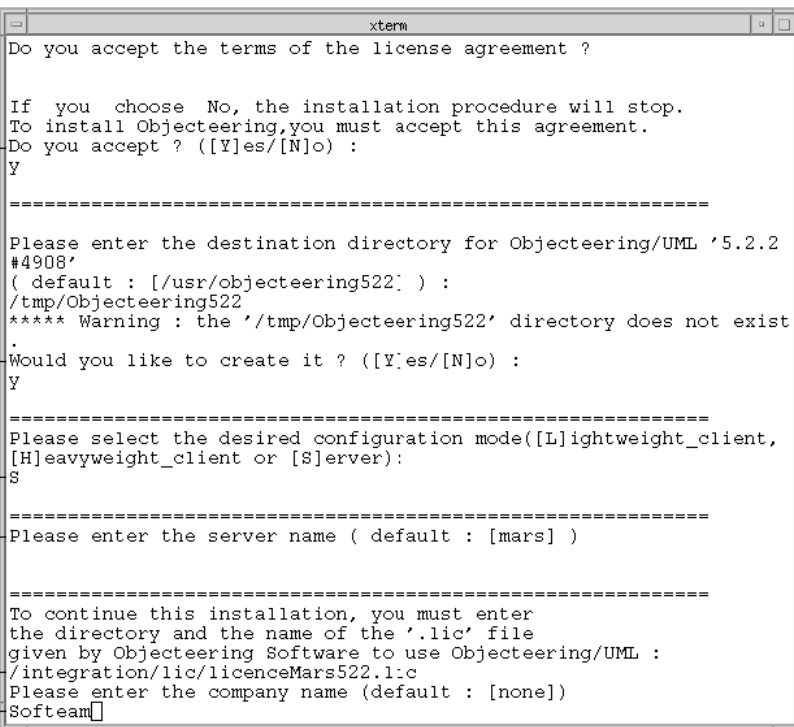
« OBJECTTEERING/UML » is a registered trademark of
Objectteering Software. All other company or product names
are trademarks or registered trademarks of their respective
owners.

Do you accept the terms of the license agreement ?

If you choose No, the installation procedure will stop. To
install Objectteering, you must accept this agreement.
Do you accept ? ([Y]es/[N]o) :
█
```

**Figure 2-36.** The start of Objectteering/UML's installation program

Click on "Yes" and continue the installation procedure, by answering the questions shown in Figure 2-37.



```
xterm
Do you accept the terms of the license agreement ?

If you choose No, the installation procedure will stop.
To install Objecteering, you must accept this agreement.
1. Do you accept ? ([Y]es/[N]o) :
Y

=====

Please enter the destination directory for Objecteering/UML '5.2.2
#4908'
( default : [/usr/objecteering522] ) :
/tmp/Objecteering522
**** Warning : the '/tmp/Objecteering522' directory does not exist
.
2. Would you like to create it ? ([Y]es/[N]o) :
Y

=====

Please select the desired configuration mode([L]ightweight_client,
3. [H]eavyweight_client or [S]erver):
S

=====

4. Please enter the server name ( default : [mars] )

=====

To continue this installation, you must enter
the directory and the name of the '.lic' file
given by Objecteering Software to use Objecteering/UML :
5. /integration/lic/licenceMars522.lic
Please enter the company name (default : [none])
6. Softeam
```

**Figure 2-37.** Running the installation procedure

Steps:

- 1 - Answer "Yes". The installation procedure then continues.
- 2 - Enter the path of the directory where Objectteering/UML is to be installed.
- 3 - Indicate the desired installation mode (lightweight client, heavyweight client or server).
- 4 - Enter the name of the server and press "*Return*" to start the installation procedure.
- 5 - Enter the license file directory (this is only necessary for server mode installations). The license will have previously been delivered to you by Objectteering Software's client support department.
- 6 - Enter the name of your company.

The Objectteering/UML installation procedure is then run.

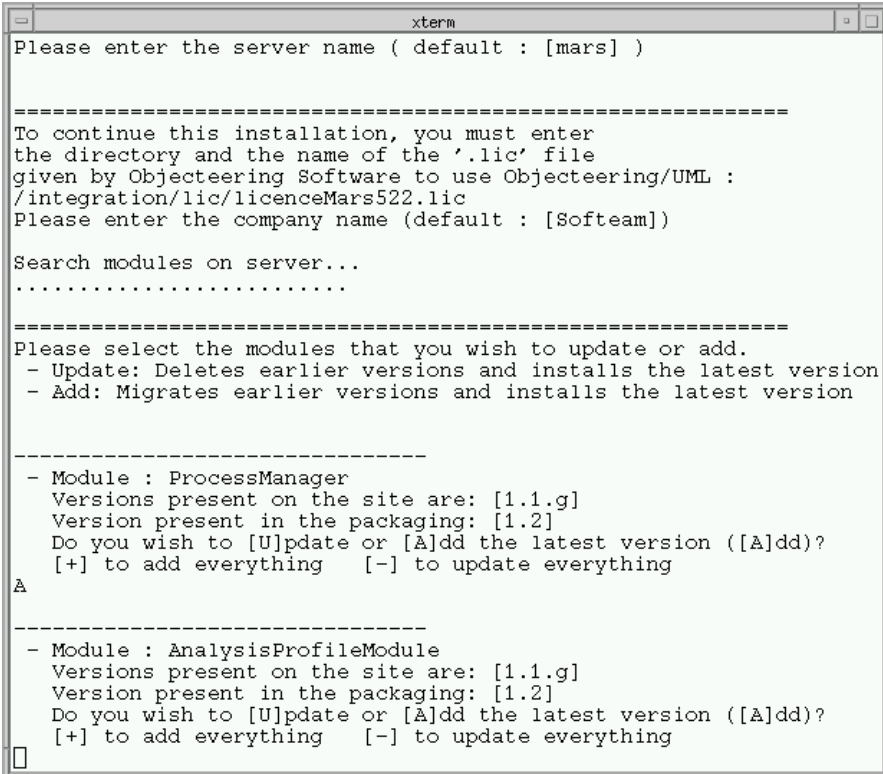
## Re-installing

When a new version of Objectteering/UML is installed over a former installation, the previous version is overwritten, but modeling, profiling and document template projects are retained.

Warning: Accessible projects are automatically upgraded to the new version!



Modules can either be updated or added (as shown in Figure 2-38 below).



```
xterm
Please enter the server name ( default : [mars] )

=====
To continue this installation, you must enter
the directory and the name of the '.lic' file
given by Objecteering Software to use Objecteering/UML :
/integration/lic/licenceMars522.lic
Please enter the company name (default : [Softeam])

Search modules on server...
.....

=====
Please select the modules that you wish to update or add.
- Update: Deletes earlier versions and installs the latest version
- Add: Migrates earlier versions and installs the latest version

-----
- Module : ProcessManager
  Versions present on the site are: [1.1.g]
  Version present in the packaging: [1.2]
  Do you wish to [U]pdate or [A]dd the latest version ([A]dd)?
  [+] to add everything    [-] to update everything
A

-----
- Module : AnalysisProfileModule
  Versions present on the site are: [1.1.g]
  Version present in the packaging: [1.2]
  Do you wish to [U]pdate or [A]dd the latest version ([A]dd)?
  [+] to add everything    [-] to update everything
□
```

**Figure 2-38.** Selecting modules to add or update

Updating a module version signifies that the new version of the module will replace the former version(s), which means that former versions will no longer be available.

Adding a module version signifies that the new version is installed and former versions remain available.

## Other necessary operations

Objectteering/UML installation is now complete. However, a few operations still remain:

- ◆ configure the Objectteering/UML user accounts, by including the content of the `<installation_directory>/user/env.csh` file in the `'.cshrc'` of the accounts that use `'csh'` and the content of the `<installation_directory>/user/env.sh` file in the `'.profile'` of the accounts using `'sh'` or `'ksh'`. Furthermore, in Solaris, the `'LD_LIBRARY_PATH'` variable must contain `'/usr/openwin/lib'`.

## Environment variables

The following environment variables are installed automatically during the installation phase:

- ◆ OBJING\_BINPATH: access path to the Objectteering/UML installation directory
- ◆ OBJING\_PATH: access path to the file directory which ensures the management of the site

These variables are defined in:

`<installation_directory>/user/env.csh`

Note: the modification of these variables is not advised.

- ◆ OBJING\_LANG: this should be set to `"us"`

Note: The variable must be initialized before launching the tool. According to which shell script you use, run either the `env.sh` or the `env.csh` script.

## Objectteering/UML's online help in UNIX

The Objectteering/UML online help is a set of HTML documents. To read them, you need an HTML drive (NSCA mosaic or netscape navigator). The choice of drive is indicated in the `O_HELP_BROWSER` environment variable. By default, mosaic is launched.

For example, to access the documentation using Netscape, set the variable in csh shell as follows:

`setenv O_HELP_BROWSER netscape`

---

## Client-Server installation in UNIX

---

### Client-server configuration

Several users can connect to the same project. In this configuration, UML modeling, UML profiling and document template projects are accessed directly by the Objectteering/UML site server.

Installation is carried out on the server in a directory that can be accessed by client stations through NFS. Furthermore, installation requires an update of the TCP/IP configuration of the client and server stations.

### TCP/IP Configuration

Before going on to anything else, it is necessary to declare a TCP/IP service, as follows:

```
objing 15001/tcp
```

This service must be declared in the system's "services" file:

```
%>/etc/services
```

**Warning!** The spaces at the end of lines must be kept, for example, by adding comments.

```
#  
# Objectteering site server  
#  
objing 15001/tcp # port no 1
```

The port numbers chosen are arbitrary but:

- ◆ they must be identical for all the machines of the Objectteering/UML site
- ◆ they must not be the same as port numbers existing in the file
- ◆ they must be greater than 1024

## Activating the Objecteering/UML site server

The Objecteering/UML site server must be activated in all cases on the machine declared as site server.

The Objecteering/UML site server is run using the "*objingsrv*" command.

- ◆ It must benefit from the shell environment defined after installation (<installation\_directory>/user/ directory).
- ◆ It must be activated with the appropriate licenses in order to write in the declared UML modeling, UML profiling and document template projects on the site.
- ◆ If the entry prompt does not come back, run it in background mode ("*objingsrv*&").
- ◆ If it displays possible diagnosis, redirect the standard exit and the error exit to a "*log*" file. By default, the "*objingsrv.log*" file is written in the \$OBJING\_PATH/site directory.

## Activating the Flexlm service

To manually launch the flexlm server, run the following command:

```
lmgrd -c <Objecteering_installation_path>/site
```

## Locating the installed software

The Objecteering/UML installation directory must be visible through NFS on all the user machines. For an improved performance, it is recommended that the installation disk be local to the site server.

## Installing the client station

The installation of the client station is carried out in a standard way, except that the site's licenses do not need to be given. These are centralized in the server.

To install a UNIX client, the server installation directory must be accessible from the UNIX platform (UNIX directories are often accessible from Windows, whilst Windows directories are not accessible from UNIX). It must, therefore, be possible to install the Objecteering/UML server on a UNIX disk, which is visible from Windows work stations.

To do this, map a network drive to the UNIX disk which is to receive Objecteering/UML files. Objecteering/UML server installation can then be run, specifying the network drive as the installation directory.

## Special cases: directories which are not shared

For many technical reasons, the client station and server software directory may be distinct. This is especially the case:

- ◆ if the client and the server are two machines with distinct architectures and systems, for example a PC client and a UNIX server
- ◆ if you want to benefit from an installation on a disk local to a client machine, and not to load the runnables of the application through the network

## Updating the client station configuration

The various client stations do not share the server's configuration. It is, therefore, necessary to update the execution environment of the client stations upon each creation, suppression or modification of a modeling, profiling or document template project (these operations are carried out using the "*Administration*" tool).

This is done by manually copying the following file below from the site server machine onto the client station:

```
<installation_directory>/site/site.ifo
```

---

## The LM\_LICENSE\_FILE environment variable

---

### Introduction

The LM\_LICENSE\_FILE environment variable is used where a FLEXlm license server is used independently of the Objecteering/UML application server.

This environment variable must be positioned on the application server and on the Objecteering/UML client workstations, with the following value:

portnum@FlexLMMachineName

"*portnum*" corresponds to the port number used by FLEXlm. By default, this is 27000.

### License contents on the license server

The license server contains a license which includes all the features of Objecteering/UML, except the Objing\_Site feature, as shown in the following example:

```
SERVER FlexLMMachineName hostidmachineFlexLM
VENDOR objlicd
FEATURE Objing_ModelerModule objlicd 5.2.2 31-jul-2003 xxxxxxxxxxxxxx \
    VENDOR_STRING=ENTERP_E HOSTID=ANY SIGN=xxxxxxxxxxxxxxxx
FEATURE Objing_HModule objlicd 5.2.2 31-jul-2003 xxxxxxxxxxxxxx \
    VENDOR_STRING=ENTERP_E HOSTID=ANY SIGN=xxxxxxxxxxxxxxxx
FEATURE Objing_CxxModule objlicd 5.2.2 31-jul-2003 xxxxxxxxxxxxxx \
    VENDOR_STRING=ENTERP_E HOSTID=ANY SIGN=xxxxxxxxxxxxxxxx
```

## **License contents on the Objecteering/UML application server**

The Objecteering/UML application server contains a license which includes only the Objing\_Site feature, as shown in the following example:

```
FEATURE Objing_Site objlcd 5.2.2 31-jul-2003 uncounted xxxxxxxxxxxxxxxx \  
  VENDOR_STRING=<SiteNumber>-ENTERP_E HOSTID=ANY
```

---

## Installing licenses

---

### Entering license information

Objectteering Software provides a license with the *.lic* extension. This license takes the following form:

- ♦ SERVER idfix 17003456 21987
  - ♦ VENDOR demo
  - ♦ FEATURE Objing\_Site demo 1.0 10-jan-2000 uncounted 426B3A9472569 \
  - ♦ VENDOR\_STRING=9999-ENTERP\_E HOSTID=ANY
  - ♦ FEATURE Objing\_modeler demo 1.0 10-jan-2000 5 3F873B783D0C \
  - ♦ VENDOR\_STRING= « 7002 »
  - ♦ FEATURE Objing\_genericity demo 1.0 10-jan-2000 5 C9ABF27B80B2
  - ♦ FEATURE Objing\_cplus demo 1.0 10-jan-2000 5 EE2C82DF8B7F
  - ♦ FEATURE Objing\_java demo 1.0 10-jan-2000 5 11FBB11E730E
-

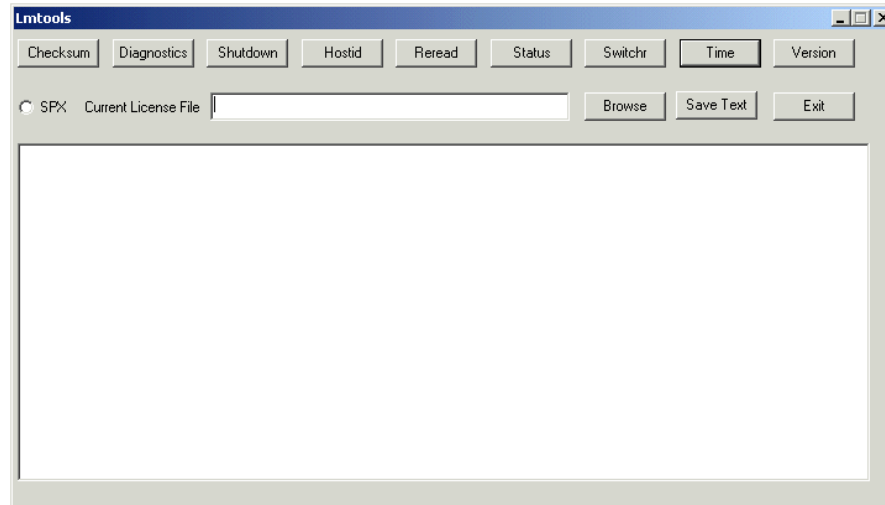


## Using Imtools

---

### Overview of Imtools (Windows)

*Imtools* is a flexlm tool delivered as standard with Objecteering/UML. It groups together a set of tools used to manage the use of licenses on the network.



**Figure 2-39.** The *Imtools* window

The ... field	is used to ...
Checksum	carry out a check of the license file.
Diagnostics	diagnose problems when a license file cannot be used or where a feature is not correct.
Shutdown	close a daemon.
Hostid	return information on the system and the hostid of machine.
Reread	force the daemon to reread the license file.
Status	provide information on the state of license activity on the server.
Switchr	switch the report write log file.
Time	print out the system's internal time settings, intended to diagnose any time zone problems.
Version	indicate the flexlm binary version.

Note: All the information given out by lmttools can be saved in a text file. To do this, click on "Save text" and choose the name of the desired file.

---

## Modifying your Objecteering/UML installation

### Overview of installation modification

To modify your Objecteering/UML installation, first activate the "Start/Programs/Objecteering/UnInstall/UnInstall Objecteering" menu. Once this menu has been activated, the "Objecteering Setup Maintenance" window appears (as shown in Figure 2-40).

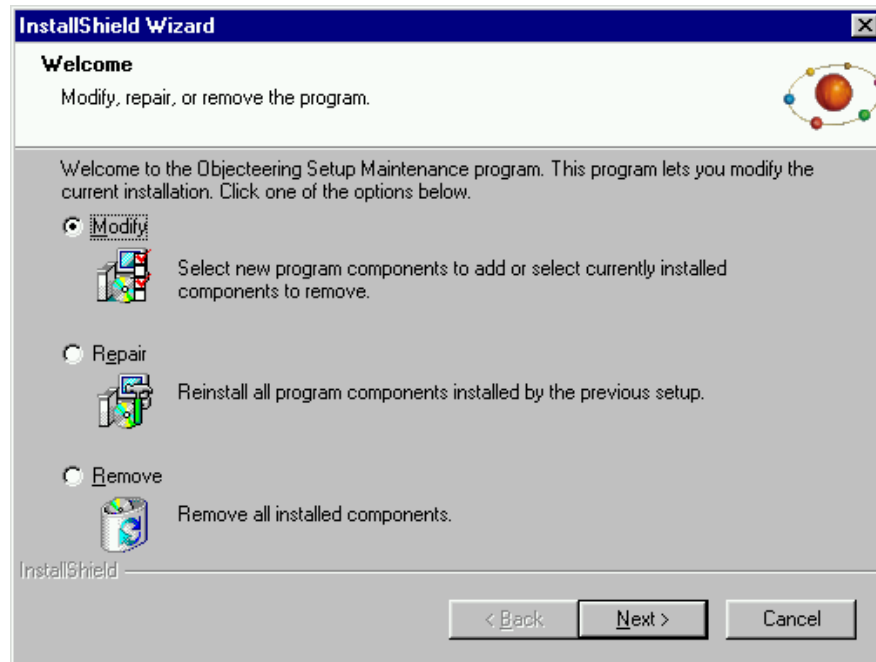


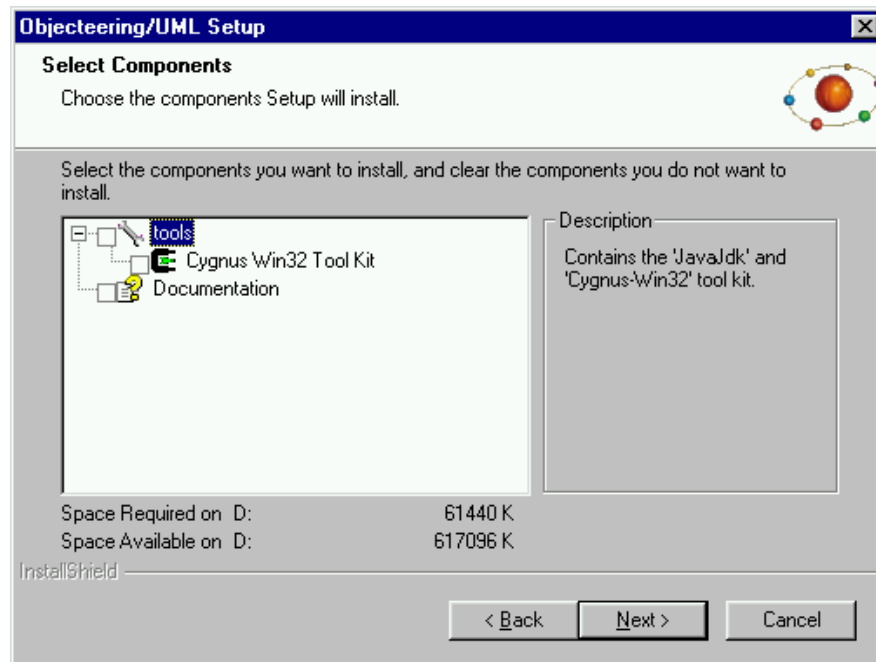
Figure 2-40. The "Objecteering Setup Maintenance" window

Three installation modification options are available:

- ◆ "*Modify*", which is used to add new program components and/or remove components which have already been installed
- ◆ "*Repair*", which is used to reinstall all program components installed during the last setup
- ◆ "*Remove*", which is used to remove all installed program components

## "Modify" mode

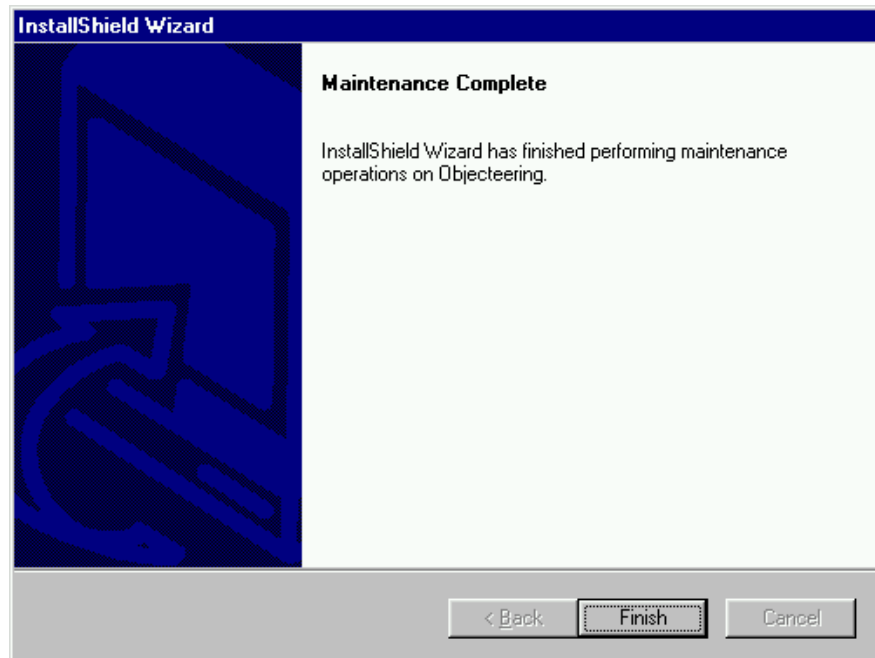
After selecting the "Modify" mode, click on the "Next" button. The following screen (Figure 2-41) then appears.



**Figure 2-41.** "Modify" mode

If you wish to add new program components to your setup, or to remove some of those already installed, simply check and/or uncheck the tick boxes next to the relevant program components.

Once you are happy with your selection, click on the "Next" button to proceed. The progress of your modifications can be monitored on the screen which then appears. When the modifications are complete, the following screen (Figure 2-42) appears.



**Figure 2-42.** Screen informing you that modifications are complete

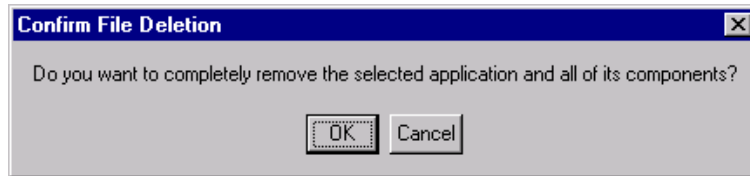
### **"Repair" mode**

After selecting the *"Repair"* mode, click on the *"Next"* button. Objectteering/UML then carries out an installation which is identical to the last setup run. You can monitor the progress of the installation on the *"Setup Status"* screen which is displayed.

At the end of this installation, the screen shown in Figure 2-42 appears, to confirm that installation modifications are complete.

### **"Remove" mode**

After selecting the *"Remove"* mode, click on the *"Next"* button. The following screen (Figure 2-43) appears.



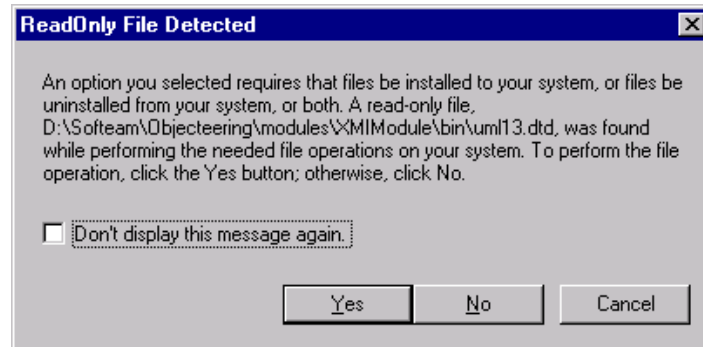
**Figure 2-43.** Removal confirmation window

Click on the *"OK"* button. The uninstallation procedure then starts.

At the end of this operation, the screen shown in Figure 2-42 appears, to confirm that installation modifications are complete.

## Read only and locked files

If read only files are detected during uninstallation or installation modification operations, the following screen (Figure 2-44) appears.



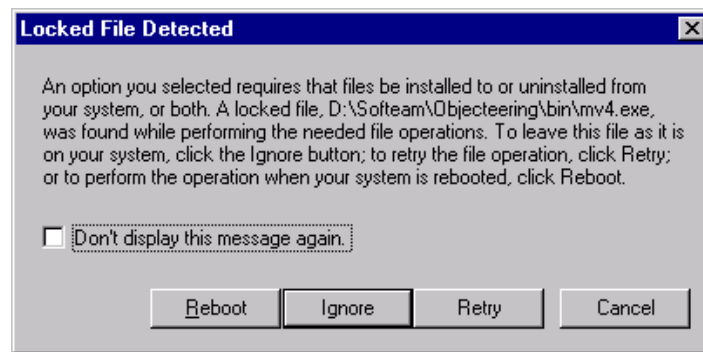
**Figure 2-44.** Window indicating that read only files have been detected

If you wish to proceed with the uninstallation or installation modification procedure, click on the "Yes" button. Checking the *"Don't display this message again"* tickbox means that read only files will automatically be uninstalled, without this confirmation question being asked again.

We recommend that you proceed with the uninstallation of read only files, since it is advisable to delete all files before reinstalling Objectteering/UML.



If locked files are detected during uninstallation or installation modification operations, the following screen (Figure 2-45) appears.



**Figure 2-45.** Window indicating that locked files have been detected

Locked files are files which are in the process of being used, for example, if Objectteering/UML is running.

---